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Instructional Practices in the State of Missouri and Teacher Attitude Toward the Statewide Assessment

Survey Report

Consequential Validity Study: Phase I Communication Arts Assessment

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CENTER FOR LEARNING, EVALUATION, AND ASSESSMENT RESEARCH

Instructional Practices in the State of Missouri and Teacher Attitude Toward the Statewide Assessment

SURVEY REPORT

Consequential Validity Study: Phase I Communication Arts Assessment

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OVERVIEW OF THE STUDY

Introduction

Recent education reform legislation in Missouri has provided sweeping mandates for change at all levels of education and in many facets of school functioning. *The Outstanding Schools Act of 1993* required the development of comprehensive curriculum frameworks, accompanied by professional development and performance assessment procedures, to guide and measure student progress. These mandates have resulted in the development and ongoing implementation of the Missouri Assessment Program (MAP), which will yield valid, reliable authentic assessment procedures for Missouri's schools and youth.

An additional benefit of developing new statewide assessments is the opportunity to influence classroom practices to account for characteristics of the tests. Although historically "teaching to the test" has been an undesirable occurrence, the advent of performance-based assessments, with their emphasis on authentic learning and problem solving, provides a positive rationale for emulating test characteristics in the classroom.

Relatively few studies have been published that address these instructional effects, or consequences, of performance assessment, and results of these studies are mixed. Koretz (1992), reporting on an evaluation of Vermont's statewide assessment initiative, concluded that using performance assessment programs to promote instructional improvement has shown few results. In contrast, Barrett (1992) reported a positive impact on instructional practices resulting from reading and writing assessments in the Riverside, California Unified School District. Because of these mixed findings, little can be concluded concerning the effects of the statewide assessment program on classroom instructional practices. Consequently, the state of Missouri needs high quality information about the relationship of the MAP to classroom practices in the state. These data should be useful in (a) understanding the current status of classroom practices in the state; (b) evaluating the effectiveness of the statewide assessment program; and (c) planning for interventions to improve classroom practices as a part of education reform.

Purpose of the Study

The purpose of the study described in this document was to investigate the current status of classroom instructional and curricular practices in communication arts in Missouri, with a longer-term goal of ascertaining changes in classroom practices that occur as a result of the implementation of the Missouri Assessment Program. We also examined school, community, and educator characteristics, including involvement in development and scoring of the assessments and supporting materials, attitudes, resources, and instructional practices, in relation to the statewide assessment project. The goal is a "benchmark baseline" for the state of Missouri in terms of enacted classroom practice.

SAMPLING

Survey Design and Selection of the Study Sample

The initial sampling procedure utilized a stratified random sampling technique to allow for adequate representation across important categorical variables throughout the state. Variables identified included grades 3, 7, and 11, and districts categorized by urban, suburban, and rural.

The initial random sampling of districts across both categorical variables yielded 51 districts for possible participation in the study. These districts were broken down as follows:

<u>Table 1.</u> Initial sampling matrix of school districts.

		Geographic region	
	Urban	Suburban	Rural
Districts (n=51)	1	10	40

All district superintendents were contacted by letter and by phone, and 43 districts agreed to participate in the study. The following table indicates district participation (n=43) by geographic location.

<u>Table 2.</u> Sampling matrix of school districts agreeing to participate in the consequential validity study in communication arts.

		Geographic region	
	Urban	Suburban	Rural
Districts (n=43)	1	10	32

Materials and information were sent to all 43 districts and survey returns were received from all 43 of these districts, yielding a return rate of 100% at the district level.

Across the 43 districts that agreed to participate, 154 individual schools were contacted by mail and phone to receive building level consent for participation in the study. Of these schools, we received returns from 112; a 73% return rate. This initial database yielded 219 teachers.

Sorting and cleaning of data yielded a fine working sample size of 219 teachers. Missing values were kept in the data set for some analyses but those sample size of splaying erratic markings were eliminated from the analysis. This resulted in retention of all 43 districts and total school participation yield of 112 buildings. Sample size fluctuated depending on the nature of the analysis.

<u>Table 3.</u> Final sampling matrix of participating school districts and teachers.

		Geographic region	
·	Urban	Suburban	Rural
Teachers (n=219)	10	120	89
Third Grade (n=116)	8	65	43
Seventh Grade (n=49)	1	27	21
Eleventh Grade (n=54)	1	28	25

Longitudinal Projections

The overall research question for this study is whether the new assessment will affect classroom practices. In order to answer this question, we need to be able to track the teachers in the current database and follow their patterns of interaction in the classroom. Accordingly, Missouri communication arts instructors will complete this survey again in January 2000.

Breakdown for the Longitudinal Analysis

In order to track individual teachers, we asked for date of birth, which will be the variable on which the data are matched when the second survey is received. In order to participate in the study, teachers signed a consent form approved by the University of Missouri – Columbia Institutional Review Board.

The following counts indicate the sample available for the follow-up survey in January of 2000.

Table 4. Longitudinal sample available from baseline returns (N=188).

		Geographic region	
	Urban	Suburban	Rural
Third Grade (n=78)	8*	65	43
Seventh Grade (n=40)	1*	27	21
Eleventh Grade (n=70)	1*	28	25

In examining the available sample for use in the follow-up survey, many cells (indicated with an asterisk) will need to be enlarged in 2000, but this is still a strong base overall for longitudinal tracking.

Teacher Demographic Characteristics

Demographic characteristics of participating teachers were determined through a variety of questions designed to give a broad overview of teacher characteristics in the state. The following areas were analyzed for responses to each of the given questions from the total sample of 219 teachers. Variations in sample size by questions are due to missing values.

Table 5. Demographic characteristics of sample by gender and by ethnicity/race.

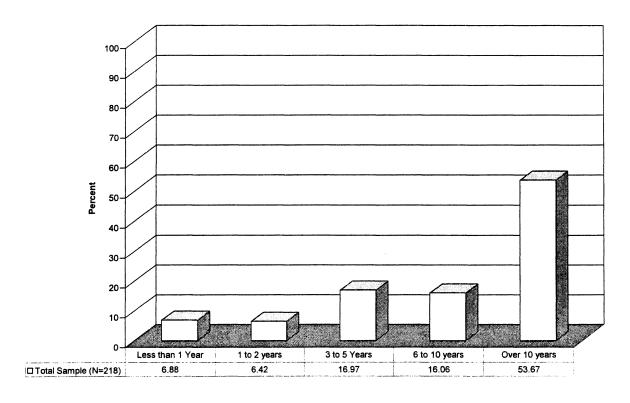
Gender (n=218)	Percent
Female	93.12%
Male	6.88%
Ethnicity/Race (n=218)	Percent
Ethnicity/Race (n=218) Caucasian	Percent 96.30%

Years of communication arts teaching experience prior to this year (N=218)

The sample indicated a considerable number of teachers with more than 10 years of teaching experience. Individual percentages by categorical response are located in Appendix B. The total sample responses were:

Less than one year	6.88%	6-10 years	16.06%
1-2 years	6.42%	More than 10 years	53.67%
3-5 years	16.97%	•	

A graphic representation of these data is shown in Figure 1.



<u>Figure 1.</u> Response percentages to Question 96: How many years have you taught prior to this year?

Highest Degree Held

A Chi-Square test of independence was significant for geographic location and level of response (χ^2 (6, N = 217) = 22.419, p = .001). Graphic representation of respondents by geographic location and level of response are shown in Figure 2, and individual percentages by categorical response are located in Appendix B. The total sample responses were:

BA or BS	34.10%
Post-bac certification	11.06%
MA, MS, and/or EdS	53.92%
Ph.D. or Ed.D.	0.92%
Other	0.00%

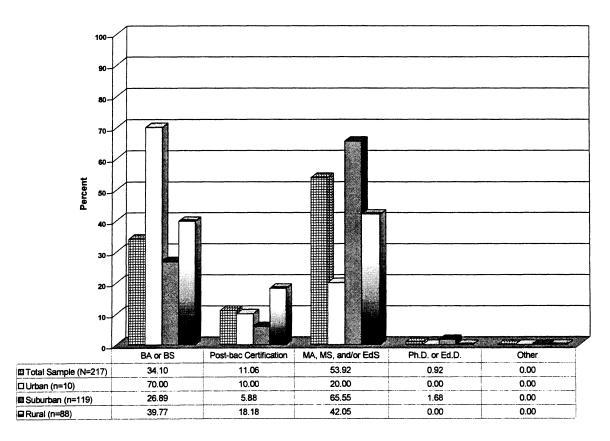


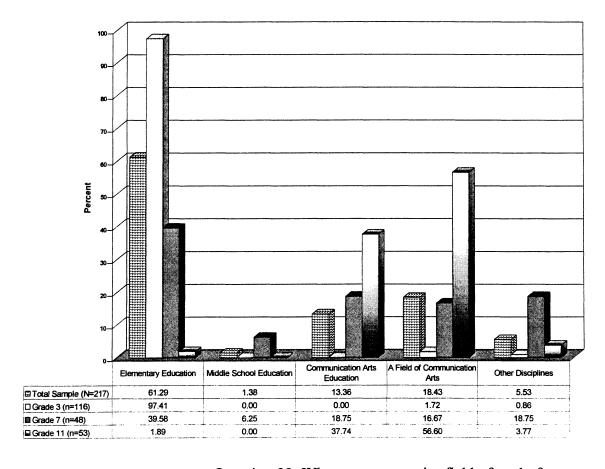
Figure 2. Response percentages to Question 97: What is the highest degree that you hold?

Major Field of Study for the Bachelor's Degree

A Chi-Square test of independence was significant for grade and level of response (χ^2 (8, N = 217) = 189.145, p = .001). Individual percentages by categorical response are located in Appendix B. The total sample responses were:

Elementary Education	61.29%
Middle School Education	1.38%
Communication Arts Education	13.36%
A Field of Communication Arts	18.43%
Other Disciplines	5.53%

Graphic representation of these data is shown in Figure 3.



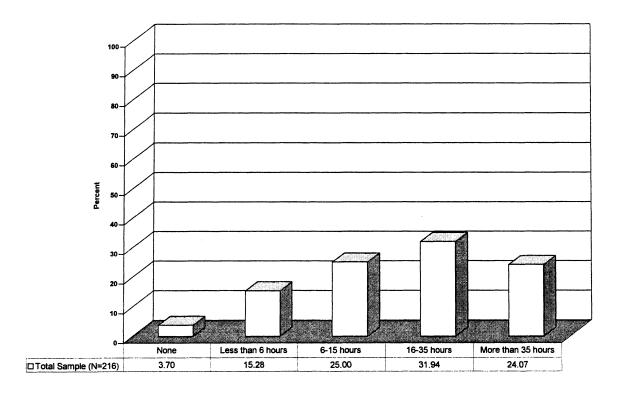
<u>Figure 3.</u> Response percentages to Question 98: What was your major field of study for your Bachelor's degree?

Total Amount of Time Spent on Professional Development

The results showed that over 56% of the teachers surveyed are spending at least 16 hours a year in professional development.

None	3.70%
Less than six hours	15.28%
6-15 hours	25.00%
16-35 hours	31.94%
More than 35 hours	24.07%

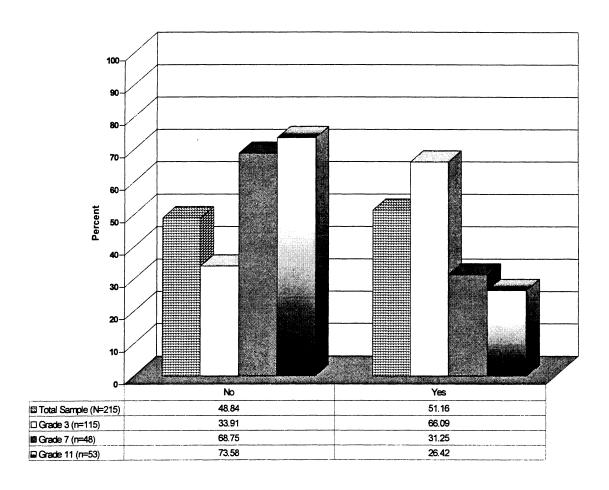
Graphic representation of these data is shown in Figure 4.



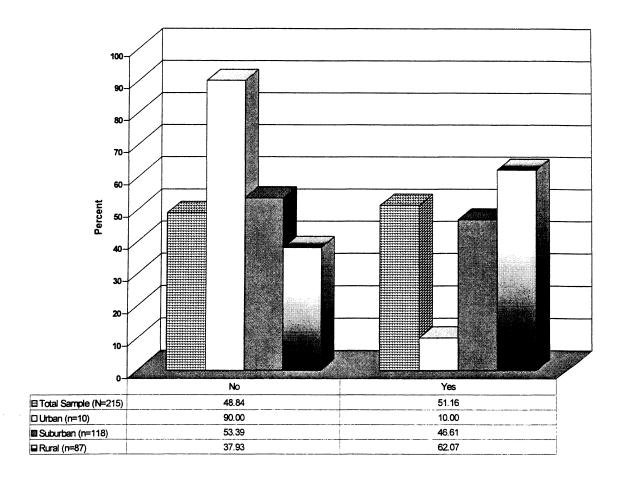
<u>Figure 4.</u> Response percentages to Question 99: What is the total amount of time you spent on professional development (e.g., national or state communication arts teacher association meetings) or in-service education in communication arts or teaching of communication arts in the last twelve months? (Do not include formal courses for which you received college credit.)

Curriculum and Assessment Activities

Forty-eight percent (48%) of all teachers responded that they had served on a school or district communication arts curriculum development committee. More of the 3rd-grade teachers report having done so (66%) than do 7th- or 11th-grade teachers (only 31% and 26%, respectively). A Chi-Square test of independence was significant for grade and level of response (χ^2 (2, \underline{N} = 216) = 30.304, \underline{p} = .001). A Chi-Square test of independence was also significant for geographic location and level of response (χ^2 (2, \underline{N} = 215) = 11.901, \underline{p} = .003). These data are presented in the following graphs.

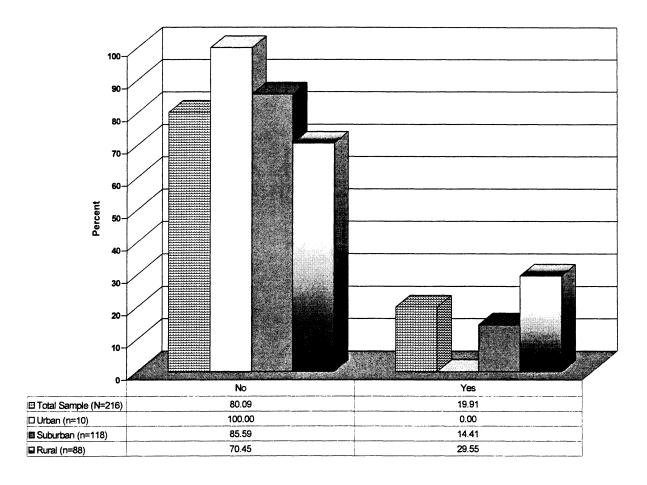


<u>Figure 5.</u> Response percentages, by grade, to Question 100: Have you served on a school or district communication arts curriculum development committee?



<u>Figure 6.</u> Response percentages, by geographic region, to Question 100: Have you served on a school or district communication arts curriculum development committee?

When asked if they had served on a district or state assessment development or selection committee, 80% of the teachers report not having done so. A Chi-Square test of independence was significant for geographic region and level of response (χ^2 (2, N = 216) = 9.852, p = .007).



<u>Figure 7.</u> Response percentages, by geographic region, to Question 101: Have you served on a school district or state assessment development or selection committee?

The majority of teachers also reported that they had not participated in a formal assessment scoring activity beyond their own classroom (69%). None of the interactions showed statistical significance.

INSTRUMENT

Measures

The initial source for the survey instruments was the *Teacher Survey of Classroom Practices* developed by State Collaborative on Assessment and Student Standards (SCASS) for use in science classrooms. The original SCASS instrument was revised for the mathematics survey, first, through content editing, and then through adaptation of the length and format.

The communication arts survey instrument was developed during the fall of 1999 and was based on the *Missouri Teacher Survey of Classroom Practices: Mathematics*. Based on responses to the initial mathematics survey given in 1998, we were able to revise the survey as we prepared to collect baseline data in communication arts. Besides editing for content and format, the number of items on the survey was reduced, from 193 to 125. Items were either deleted because they failed to load on any factor of our factor analyses, because they were redundant, or because they could be grouped under a single, broader question. The insert was also revised to gather more accurately the information on class time and unit content that we were seeking.

Based on the revision, the items on the *Missouri Teacher Survey of Classroom Practices:*Communication Arts can be broken down as follows:

<u>Table 6.</u> Breakdown of sections in the communication arts survey by item number.

Item Numbers	Section
1-5	Scheduling and Homework
6-10	Outside of Class Expectations
11-27	Instructional Practices
28-38	Grading Practices
39-49	Teacher Preparation
50-59	Instructional Influences
60-63	Technology
64-88	Teacher Beliefs
89-93	Impression of the MAP
94-99	Demographic Data
100-102	Professional Development
103-116	Teacher Beliefs (Communication Arts)
117-121	Rating Assessment

Part 1 of the survey is designed to be non-domain specific. It addresses the degree of influence on classroom practice exerted by curriculum frameworks and external tests. Additional items assess teacher involvement in professional development and professional affairs, level of involvement in Missouri activities, and teacher philosophy and opinion related to the new assessment program. Sections of the survey will allow investigation of teacher epistemological beliefs and teacher attitudes toward the performance-based assessment program and are based on research by Cannon (1995), Idiris & Fraser (1994), Hashweh (1996), Simon & Schifter (1993), Kember & Gow (1994), and Prawat (1992). Part 2 was designed to ask questions specific to the domain of communication arts and the communication arts assessment. The bulk of this section focuses on teacher epistemological beliefs with respect to communication arts.

Psychometric Properties of the Teacher Survey

Preliminary data on psychometric properties of the survey are presented below. These data include factor structure of all non-dichotomous items on the survey, factor structure of specific continuous items on the survey, and internal consistency coefficients for continuous item scales.

<u>Factor Structure and Alpha Coefficients—Instructional Practices, Grading, Instructional Influences</u>, and Teacher Beliefs

In order to evaluate the items within the instrument for the development of scales, factor analyses were run on all sets of continuous items. Eigenvalues greater than one were retained in the preliminary analyses. Subsequent reduction following the examination of scree plots resulted for teacher preparation items. Items were retained if factor loadings exceeded .40.

<u>Instructional Practices.</u> The items for instructional practices within the state of Missouri consisted of 10 questions presented in a Likert format of 1 to 5 with 1 designated as "never," 2 designated as "less than half of class period," 3 designated as "half of class period," 4 designated as "greater than half of class period," and 5 designated as "almost all." The factor loadings, utilizing factor analysis and promax rotation, resulted in the following clusters of items:

<u>Table 7.</u> Instructional practices.

<u>Item</u>	Question	Factor Loadings			
Factor 1: Co	Factor 1: Communicating about Communication Arts				
18.	Take part in whole class discussion.	.77			
19.	Ask questions to improve understanding.	.89			
20.	Make predictions, guesses, or hypotheses.	.79			
23.	Apply concepts discussed in class to everyday life.	.45			
25.	Write about class content.	.44			
Factor 2: Per	formance-based activities				
13.	Maintain a portfolio of own work.	.64			
14.	Work in pairs or small groups.	.59			
22.	Score or grade own work using a scoring guide or rubric.	.53			
26.	Keep a journal.	.55			
27.	Peer Review.	.48			
Factor 3: Tra	ditional individual activities				
11.	Listen to the teacher explain something.	.48			
12.	Read from a textbook.	.62			
16.	Answer questions from a textbook or worksheet.	.65			
17.	Take a quiz or test.	.65			

Factors 1, 2, and 3 had Cronbach Coefficient Alpha levels of .86, .73, and .76 respectively. These items are suitable for scaling purposes.

<u>Grading Practices.</u> The items for grading practices consisted of 11 questions presented in a Likert format of 1 to 5 with 1 designated as "not important" and 5 as "important." The factor loadings, utilizing factor analysis and promax rotation, resulted in the clusters of items shown in Table 8.

<u>Table 8.</u> Grading practices.

<u>Item</u>	Question	Factor Loadings			
Factor 1: Performance-based Assessment					
30.	Performance tasks or events.	.62			
31.	Observation of student behavior.	.49			
32.	Individual projects.	.65			
33.	Group projects.	.60			
35.	Portfolios.	.55			
38.	Peer review.	.58			
Factor 2: Tra	aditional Assessment				
28.	Objective tests (e.g., multiple choice, true/false).	.66			
36.	Completion of written worksheets.	.73			
37.	Individual seatwork.	.62			

Factors 1 and 2 had Cronbach Coefficient Alpha levels of .75 and .73, respectively. These items are suitable for scaling purposes.

<u>Instructional Influences.</u> The items for instructional influences within the state of Missouri consisted of 10 questions presented in a Likert format of 1 to 5 with 1 designated as "no influence" and 5 as "very strong influence." The factor loadings, utilizing factor analysis and promax rotation, resulted in the following clusters of items:

Table 9. Instructional influences.

<u>Item</u>	Question	Factor Loadings			
Factor 1: Ex	Factor 1: Externally Mandated				
50.	Missouri's education curriculum framework or guidelines.	.83			
51.	Your district's curriculum framework or guidelines.	.58			
53.	Missouri's State Assessment Program.	.75			
Factor 2: Local Considerations					
55.	Your understanding of what motivates your students.	.56			
56.	Available equipment and supplies.	.50			
57.	Student aptitude.	.64			
58.	Practices of other teachers.	.50			
59.	Parents.	.50			

Factors 1 and 2 had Cronbach Coefficient Alpha levels of .78 and .67, respectively, making these factors suitable for scaling purposes.

Teacher Beliefs. The items relating to teacher beliefs within the state of Missouri consisted of 25 domain independent items and 14 domain specific items. These questions were presented in a Likert format of 1 to 5 with 1 designated as "strongly disagree" and 5 as "strongly agree." The factor loadings, utilizing factor analysis and promax rotation, resulted in the following clusters of items:

<u>Table 10.</u> Teacher beliefs.

<u>Item</u>	Question	Factor Loadings			
Factor 1: Tea	Factor 1: Teacher as Expert Facilitator within Standardized Practice				
71.	A teacher's part in the attainment of subject matter is to diagnose correct errors.	e and .49			
73.	The teacher should primarily lead whole group instruction.	.45			
75.	It is important to have numerical scores so that a student's progrecan be compared to that of other students.	ess .41			
76.	Teachers should impart knowledge to students.	.55			
79.	Teachers construct the correct understanding for students.	.64			
81.	Students need to learn basic skills before they can learn higher of thinking skills.	rder .59			
82.	It is best when only one activity is taking place at one time in a classroom.	.47			
83.	One of the main purposes of assessment is to gauge whether or n student has mastered the material to know whether a student car on to the next level of instruction.				
84.	Teachers and curriculum developers should decide what children and how they learn it.	n learn .48			
104.	It is important for students to learn basic skills (e.g., letter recogn spelling, grammar) before learning advanced concepts and princi				

Factor 2:	: Coll	aborative Instructional Design	
1	107.	I feel supported by colleagues to try out new ideas in teaching communication arts.	.71
1	108.	I receive support from the school administration for teaching communication arts.	.81
1	109.	Communication arts teachers in this school regularly share ideas.	.69
1	110.	Communication arts teachers in this school regularly observe each other teaching classes as part of sharing and improving instruction.	.50
1	13.	Most communication arts teachers in this school contribute actively in communication arts curriculum development.	.58
1	15.	I feel that I have many opportunities to learn new things in my present job.	.53
. 1	16.	I have time during the regular school week to work with my peers on curriculum.	.53
Factor 3:	: Activ	vity-based Learning	
6	66.	Instruction should be composed of projects and centers.	.70
69	9.	Most of teacher preparation time should be used to prepare the classroom for hands-on activities.	.65
80	0.	Learning should consist primarily of hands-on activities.	.70
10	05.	Activity-driven communication arts classes are more effective than non-activity-driven classes.	.45

Factor 4: Active Teacher Involvement in a Culture of Practice Subject matter should be integrated into all areas of the curriculum. 67. .43 68. Novel solutions to problems should be encouraged. .49 72. Assessment should be integrated into the learning and instructional .59 process. 74. Teachers facilitate students finding their own meaning in experiences and interpretations of their environment. .45 85. Teachers should imbed subject matter in authentic experiences. .46 106. I enjoy teaching communication arts. .46 I consider myself a "master" teacher. 114. .41

These four factors had Cronbach Coefficient Alpha levels of .78, .81, .74, and .70, respectively, making these factors suitable for scaling purposes.

References:

- Barrett, T. J. (1992). <u>Implementation of an integrated language arts performance assessment in a large urban school district: Technical issues in aggregating and reporting results.</u> Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Cannon, J. R. (1995). Further validation of the Constructivist Learning Environment Survey: Its use in the elementary science methods course. <u>Journal of Elementary Science Education</u>, 7(1), 47-62.
- Hashweh, M. Z. (1996). Effects of science teachers' epistemological beliefs in teaching. Journal of Research in Science Teaching, 33(1), 47-63.
- Idiris, S, & Fraser, B. J. (1994). <u>Determinants and effects of learning environments in agricultural science classrooms in Nigeria.</u> Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- Kember, D., & Gow, L. (1994). Orientations to teaching and their effect on the quality of student learning. <u>Journal of Higher Education</u>, 65(1), 58-74.
- Koretz, D., et al. (1992). <u>Can portfolios assess student performance and influence instruction?</u> The 1991-92 Vermont Experience. Los Angeles, CA: CRESST.
- Prawat, R. S. (1992). Teachers' beliefs about teaching and learning: a constructivist perspective. American Journal of Education, 1000(3), 354-395.
- Simon, M. A., & Schifter, D. (1993). Toward a constructivist perspective: the impact of a mathematics teacher inservice program on students. <u>Educational Studies in Mathematics</u>, 25(4), 331-340.

PRELIMINARY FINDINGS

Class Scheduling

Questions 1 through 3 asked teachers to identify the length and frequency of class periods for the most recent unit covered. Tables 11 through 13 indicate the percentage responses to the questions.

<u>Table 11.</u> Response percentages to Question 1: Are you on block scheduling for this course?

		<u>No</u>	Yes	<u>n</u>
Total sample		68.7	31.3	214
	3rd	84.7	15.3	111
Grade	7th	51.0	49.0	49
	11th	50.9	49.1	53
	Urban	87.5	12.5	8
Geographic region	Suburban	66.7	33.3	117
	Rural	70.1	29.9	87

<u>Table 12.</u> Total sample response percentages to Question 2: How many times per week does the class for which you are answering this survey meet?

One time	Two times	Three times	Four times	Five times	<u>n</u>
0.0	4.2	10.4	0.0	85.4	212

<u>Table 13.</u> Total sample response percentages to Question 3: How long is each of these class periods?

Under 40 min.	40-60 min.	61-90 min.	91-120 min.	Greater than 120 min.	<u>n</u>
6.5	40.7	34.7	8.3	9.7	216

Outside of Class Expectations

Questions 4 through 5 asked teachers to identify frequency and expected time spent by students on the assigned homework. Tables 14 and 15 indicate the percentage responses to the questions.

<u>Table 14.</u> Total sample response percentages to Question 4: How often do you usually assign homework?

Never	Less than 1/2 of class periods	1/2 of class periods	More than 1/2 of class periods	Every day	<u>n</u>
3.2	37.0	20.1	19.2	20.5	219

<u>Table 15.</u> Total sample response percentages to Question 5: How many minutes do you expect your average student to spend on the homework you assign?

None assigned	Less than 15 min.	15-30 min.	31-60 min.	More than 60 min.	<u>n</u>
2.7	16.4	67.1	13.2	0.5	219

Questions 6 through 10 were related to the types of work expected of students outside of class for the unit specified in Part 3 of the survey. Table 16 reports the percentage responses for the total sample.

Table 16. Total sample response percentages to Questions 6 through 10.

Quest	tion:	<u>No</u>	<u>Yes</u>	<u>n</u>
6:	Read textbook.	40.2	59.8	219
7:	Complete an independent project.	17.8	82.2	219
8:	Complete worksheets.	25.6	74.4	219
9:	Keep a journal.	75.3	24.7	219
10:	Complete a group project.	68.8	31.2	218

As Table 16 indicates for the communication arts unit described in Part 3 of the Survey, 40% of the sample report that students were not expected to read a communication arts textbook

outside of class, 75% were not expected to keep a communication arts journal, and 69% were not expected to complete a group project. In addition, 82% reported that students were expected to complete worksheets outside of class, and 74% reported that students were expected to complete an independent project.

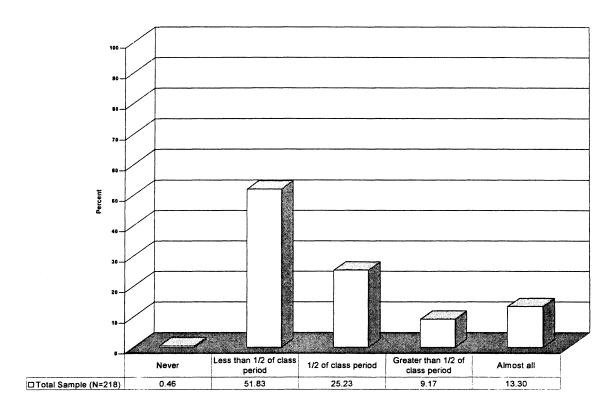
Instructional Practices in Communication Arts

Questions 11 through 27 of the survey were designed to collect information about teacher practices throughout the state of Missouri. For each question, teachers were asked, "How often does the average student do these things *in* class?" Teachers were given a choice of five Likert-scale responses ranging from 1 (Never) to 5 (Almost all class period) to indicate the amount of time they engaged in each of the instructional practices. Summary data of the responses to these questions for the entire teacher sample, as well as these data broken down by grade (3rd, 7th, and 11th grade) and geographic regions (urban, suburban, and rural) can be found in Appendix B.

Results for questions 11 through 27 were analyzed using one-way MANOVA, between-groups design. This analysis revealed a significant multivariate effect for grade, Wilks' Lambda = .60, $\underline{F}(34, 390) = 3.23$; $\underline{p} < .0001$. Analysis also revealed a significant multivariate effect for geographic region, Wilks' Lambda = .70, $\underline{F}(34, 388) = 2.227$; $\underline{p} < .0002$.

Individual items were analyzed using one-way ANOVA, between-groups design. For items that showed statistical significance by the categorical variables, the test results are reported and the percent of teachers who responded to each choice on the Likert scale (1, 2, 3, 4, or 5) are represented in graphical and tabular form. For items that were not statistically significant by the categorical variables, response patterns for the total sample are reported.

Question 11 elicited information to determine how often teachers explained something about communication arts during a typical class period. For the categorical variables, no statistically significant relationships were found. The percent of teachers who responded to each option of the Likert scale is reported in Figure 8.



<u>Figure 8.</u> Response percentages, for total sample, to Question 11: Listen to the teacher explain something about communication arts.

As indicated in the figure, 52% of the teachers indicated that students spend less than half the class period listening to the teacher explain something about communication arts.

Question 12 asked teachers how often they required students to read about communication arts from a textbook. This analysis revealed a significant difference for geographic region, $\underline{F}(2, 210) = 7.38$; $\underline{p} < 0.0008$. Post-hoc Scheffé analysis showed significant differences between responses of urban and suburban teachers and responses of urban and rural teachers ($\underline{p} < .05$). There was no significant difference between responses of suburban and rural teachers. Summary data for this question can be found in Figure 9.

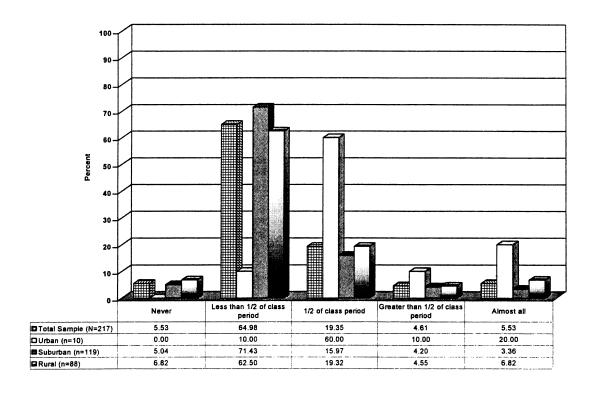
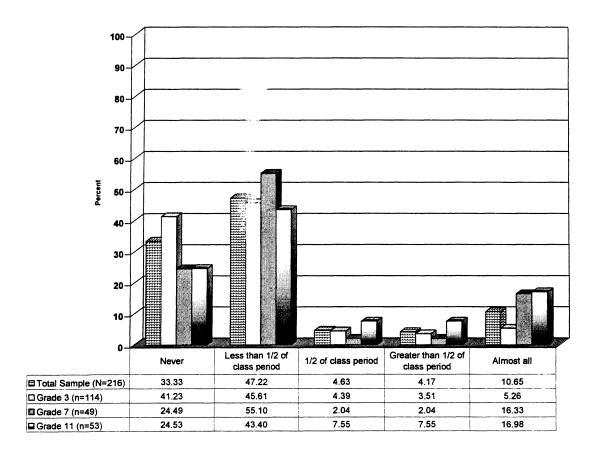


Figure 9. Response percentages, by geographic region, to Question 12: Read from a textbook.

No significant relationship was found between responses to this question and grade.

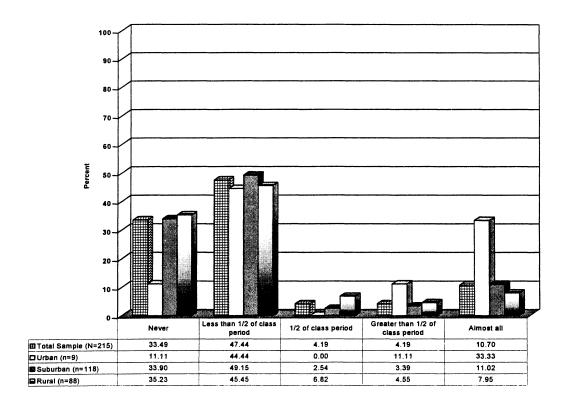
Care should be used in interpreting this statistic because of the small urban sample.

Question 13 was designed to determine how often teachers require students to maintain a portfolio of their work in their communication arts class. Analysis revealed significance for grade, $\underline{F}(2, 211) = 5.81$; $\underline{p} < 0.0035$. Post-hoc Scheffé analysis showed a significant difference between responses of 3rd- and 11th-grade teachers ($\underline{p} < .05$). There were no significant differences between responses of 3rd- and 7th-grade teachers, or between responses of 7th- and 11th-grade teachers. Summary data for this question can be found in Figure 10.



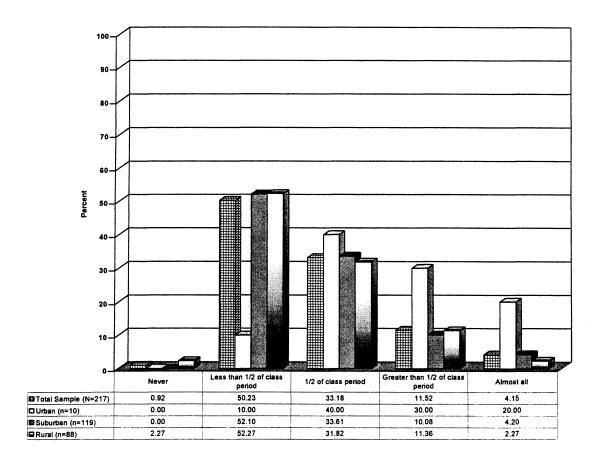
<u>Figure 10.</u> Response percentages, by grade, to Question 13: Maintain a portfolio of his/her own work.

Question 13 also showed significance for geographic region, $\underline{F}(2, 210) = 3.18$; $\underline{p} < 0.0438$. Post-hoc Scheffé analysis showed significant differences between responses of urban and suburban teachers and responses of urban and rural teachers ($\underline{p} < .05$). There was no significant difference between responses of suburban and rural teachers. Summary data for this question can be found in Figure 11.



<u>Figure 11.</u> Response percentages, by geographic region, to Question 13: Maintain a portfolio of his/her own work.

Question 14 asked teachers how often they required students to work in pairs or in small groups during a typical class period. Analysis revealed a significant difference for geographic region, $\underline{F}(2,210)=5.50$; $\underline{p}<0.0047$. Post-hoc Scheffé analysis showed significant differences between responses of urban and suburban teachers and responses of urban and rural teachers ($\underline{p}<.05$). There was no significant difference between responses of suburban and rural teachers. Summary data for this question can be found in Figure 12.



<u>Figure 12.</u> Response percentages, by geographic region, to Question 14: Work in pairs or small groups.

No significant relationship was found between responses to this question and grade.

Question 15 asked teachers how often a computer is used in the classroom during a typical class period. Analysis revealed a significant difference for geographic region, $\underline{F}(2, 210) = 4.38$; $\underline{p} < 0.0137$. Post-hoc Scheffé analysis showed a significant difference between responses of suburban and rural teachers ($\underline{p} < .05$). There were no significant differences between responses of urban and rural teachers, or between responses of urban and suburban teachers. Summary data for this question can be found in Figure 13.

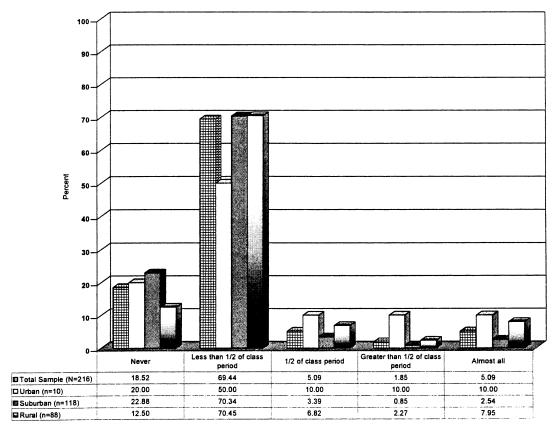
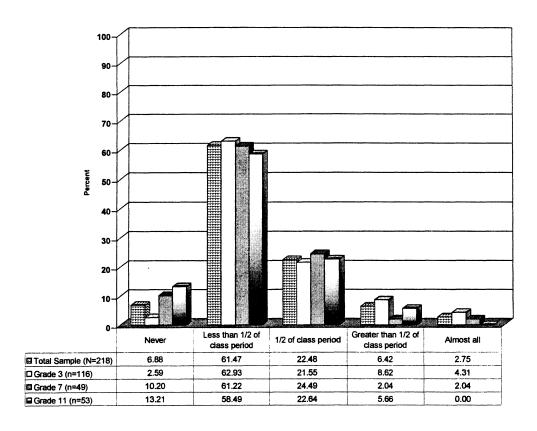


Figure 13. Response percentages, by geographic region, to Question 15: Use the computer.

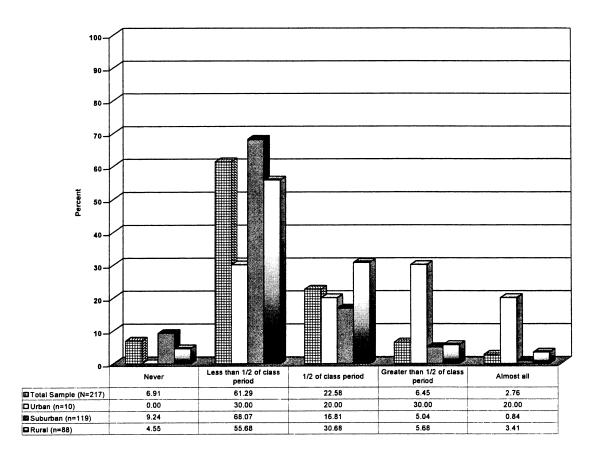
No significant relationship was found between responses to this question and grade.

Question 16 asked teachers how often students answer questions from a textbook or worksheet during a typical class period. Analysis revealed significance for grade, $\underline{F}(2, 211) = 5.81$; $\underline{p} < 0.0035$. See Figure 14 for representations of the summary data for this question.



<u>Figure 14.</u> Response percentages, by grade, to Question 16: Answer questions from a textbook or a worksheet.

Question 16 also showed a significant difference for geographic region, $\underline{F}(2, 210) = 14.17$; $\underline{p} < 0.0001$. Post-hoc Scheffé analysis showed significant differences between responses of urban and suburban teachers, responses of urban and rural teachers, and responses of suburban and rural teachers ($\underline{p} < .05$). Summary data for this question can be found in Figure 15.



<u>Figure 15.</u> Response percentages, by geographic region, to Question 16: Answer questions from a textbook or a worksheet.

Question 17 asked teachers how often they required students to take a quiz or test. Analysis revealed a significant difference for geographic region, $\underline{F}(2, 210) = 5.43$; $\underline{p} < 0.0050$. Post-hoc Scheffé analysis showed significant differences between responses of urban and suburban teachers and between responses of urban and rural teachers. ($\underline{p} < .05$). There was no significant difference between responses of suburban and rural teachers. Summary data for this question can be found in Figure 16.

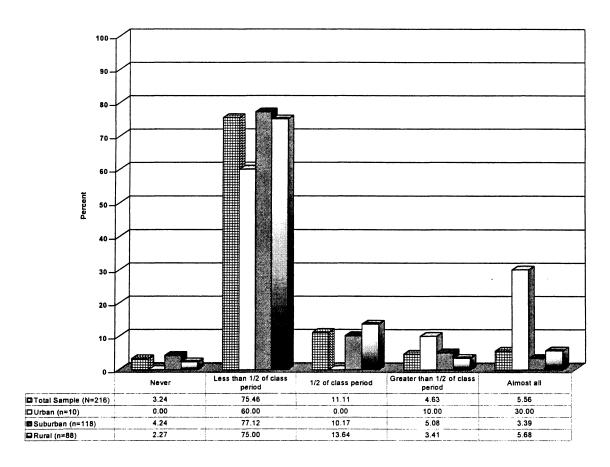
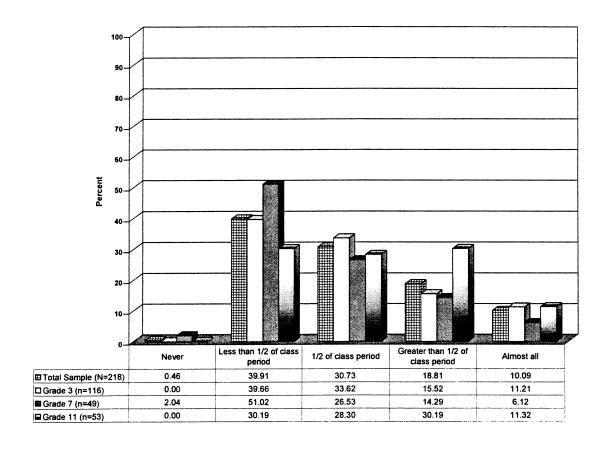


Figure 16. Response percentages, by geographic region, to Question 17: Take a quiz or test.

No significant relationship was found between responses to this question and grade.

Care should be used in interpreting this statistic because of the small urban sample.

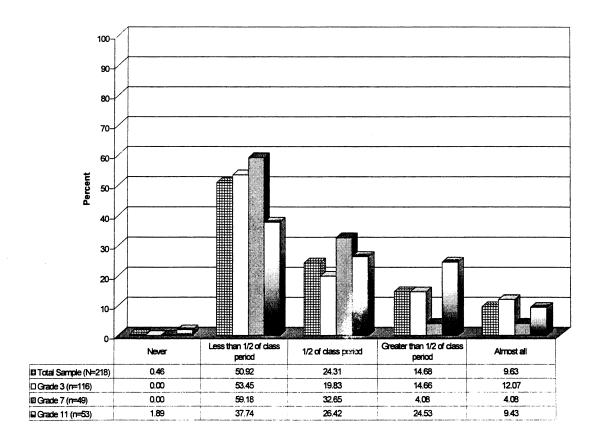
Question 18 assessed how often teachers required their students to engage in whole class discussions in communication arts class. Analysis revealed a significant difference for grade, $\underline{F}(2, 211) = 3.17$; $\underline{p} < 0.0440$. Post-hoc Scheffé analysis showed that responses of 7th- and 11th-grade teachers were significantly different ($\underline{p} < .05$). There were no significant differences between responses of 3rd- and 7th-grade teachers, or between responses of 3rd- and 11th-grade teachers. See Figure 17 for displays of the summary data.



<u>Figure 17.</u> Response percentages, by grade, to Question 18: Take part in a whole class discussion.

No significant relationship was found between responses to this question and geographic region.

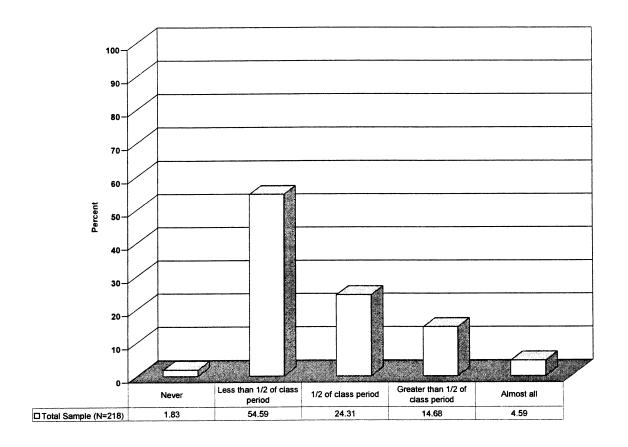
Question 19 was designed to determine how often teachers encouraged students to ask questions to improve their understanding of communication arts in a typical class period. Post-hoc Scheffé analysis showed that responses of 7th- and 11th-grade teachers were significantly different (p < .05). There were no significant differences between the responses of 3rd- and 7th-grade teachers, or between the responses of 3rd- and 11th-grade teachers. Figure 18 illustrates the summary data for this question.



<u>Figure 18.</u> Response percentages, by grade, to Question 19: Ask questions to improve understanding.

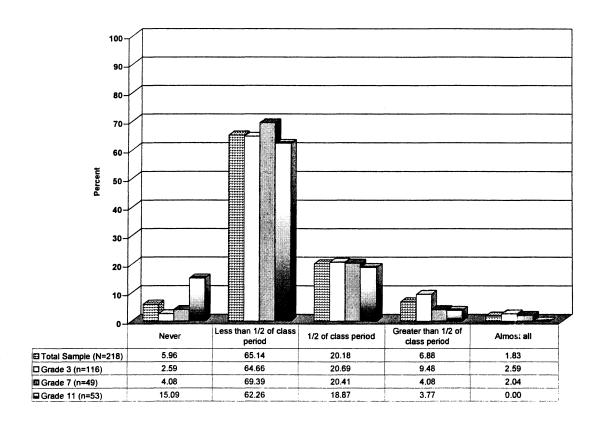
No significant relationship was found between responses to this question and geographic region.

Question 20 was used to collect data on how often teachers asked their students to make predictions, guesses, or hypotheses in a typical communication arts class. For the categorical variables, no statistically significant relationships were found. Summary data can be found in Figure 19.



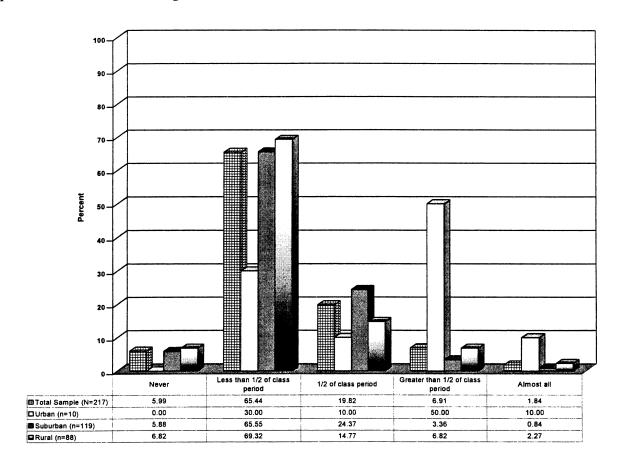
<u>Figure 19.</u> Response percentages, for total sample, to Question 20: Make predictions, guesses or hypotheses.

Question 21 assessed how often teachers asked their students to make maps, drawings, or models to illustrate their communication arts ideas during a typical class period. Analysis revealed a significant difference for grade, $\underline{F}(2, 211) = 3.16$; $\underline{p} < 0.0446$. Post-hoc Scheffé analysis showed that responses of 3rd- and 11th-grade teachers were significantly different ($\underline{p} < .05$). Figure 20 displays the summary data for this question.



<u>Figure 20.</u> Response percentages, by grade, to Question 21: Make maps, drawings, or models to show communication arts ideas.

Question 21 also showed a significant difference for geographic region, $\underline{F}(2, 210) = 7.15$; $\underline{p} < 0.0010$. Post-hoc Scheffé analysis showed significant differences between responses of urban and suburban teachers and between responses of urban and rural teachers ($\underline{p} < .05$). There was no significant difference between responses of suburban and rural teachers. Summary data for this question can be found in Figure 21.



<u>Figure 21.</u> Response percentages, by geographic region, to Question 21: Make maps, drawings, or models to show communication arts ideas.

Question 22 was designed to determine how often teachers required their students to score or grade their own work with the use of a scoring guide or rubric in a typical class period. Analysis revealed a significant difference for grade, $\underline{F}(2, 211) = 3.04$; $\underline{p} < 0.0500$. Post-hoc Scheffé analysis showed that responses of 3rd- and 7th-grade teachers were significantly different ($\underline{p} < .05$). There were no significant difference between responses of 3rd- and 11th-grade teachers or between responses of 7th- and 11th-grade teachers. Figure 22 reveals summary data for this question.

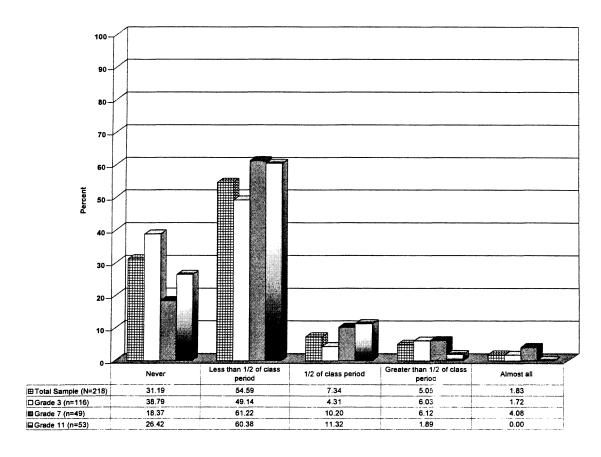
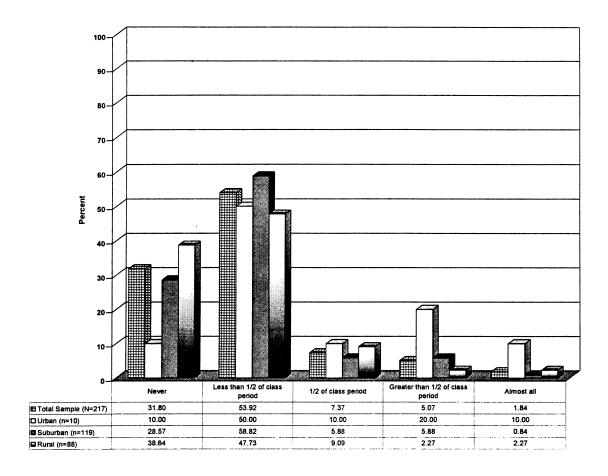


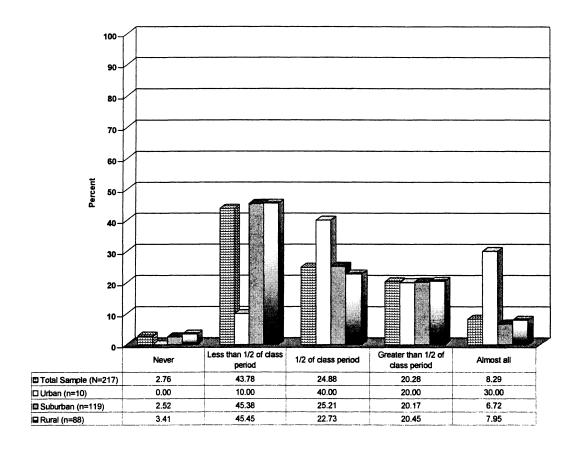
Figure 22. Response percentages, by grade, to Question 22: Score or grade his/her own work using a scoring guide or rubric.

Question 22 also showed a significant difference for geographic region, $\underline{F}(2, 210) = 3.04$; $\underline{p} < 0.0497$. Post-hoc Scheffé analysis showed a significant difference between responses of urban and rural teachers ($\underline{p} < .05$). There were no significant differences between responses of urban and suburban teachers, or between responses of suburban and rural teachers. Summary data for this question can be found in Figure 23.



<u>Figure 23.</u> Response percentages, by geographic region, to Question 22: Score or grade his/her own work using a scoring guide or rubric.

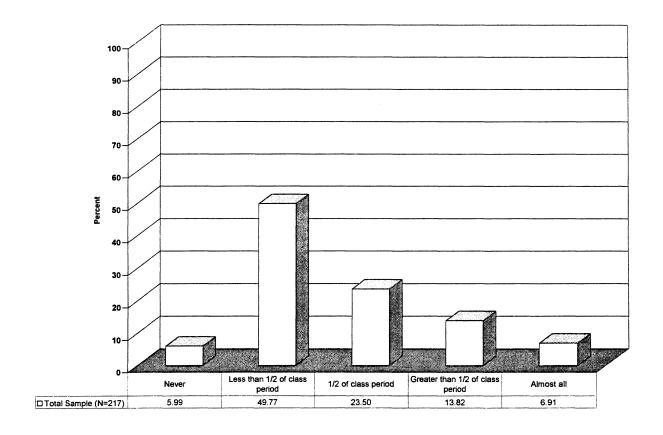
Question 23 was designed to assess how often teachers required their students to apply communication arts concepts to everyday life. Post-hoc Scheffé analysis showed a significant difference between responses of urban and suburban teachers (p < .05). There were no significant differences between responses of urban and rural teachers, or between responses of suburban and rural teachers. Summary data for this question can be found in Figure 24.



<u>Figure 24.</u> Response percentages, by geographic region, to Question 23: Apply communication arts concepts discussed in class to everyday life.

No significant relationship was found between responses to this question and grade.

Question 24 assessed how often teachers asked their students to read about class content from sources other than a textbook during a typical class period. For the categorical variables, no statistically significant relationships were found. The percent of teachers who responded to each option of the Likert scale is reported in Figure 25.



<u>Figure 25.</u> Response percentages, for total sample, to Question 24: Read about class content from sources other than a textbook.

Question 25 asked teachers how often they require students to write about class content during a typical class period. Analysis revealed a significant difference for grade, $\underline{F}(2, 211) = 3.70$; $\underline{p} < 0.0263$. Post-hoc Scheffé analysis showed that responses of 3rd- and 11th-grade teachers were significantly different ($\underline{p} < .05$). There were no significant differences between responses of 3rd- and 7th-grade teachers or between responses of 7th- and 11th-grade teachers. Summary data can be found in Figure 26.

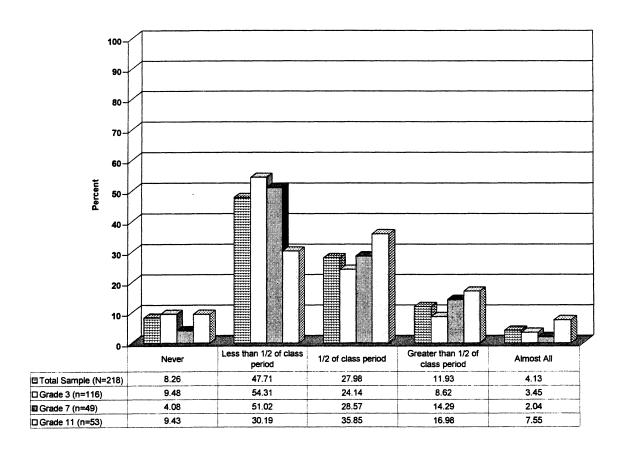


Figure 26. Response percentages, by grade, to Question 25: Write about class content.

No significant relationship was found between responses to this question and geographic region.

Question 26 asked teachers to indicate how much time the students spend keeping a journal in class. Analysis revealed a significant difference for geographic region, $\underline{F}(2, 210) = 5.43$; $\underline{p} < 0.0050$. Post-hoc Scheffé analysis showed significant differences between responses of urban and suburban teachers and responses of urban and rural teachers ($\underline{p} < .05$). There was no significant difference between responses of suburban and rural teachers. Summary data for this question can be found in Figure 27.

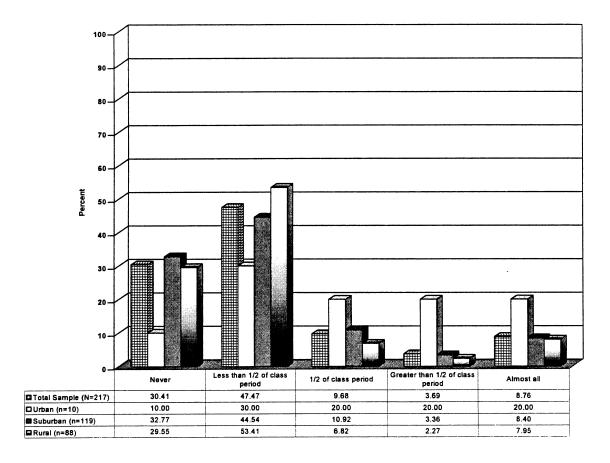


Figure 27. Response percentages, by geographic region, to Question 26: Keep a journal.

No significant relationship was found between responses to this question and grade.

Care should be used in interpreting this statistic because of the small urban sample.

Question 27 required teachers to indicate the amount of class time their students spent on peer review during a typical class period. Analysis revealed a significant difference for grade, $\underline{F}(2, 211) = 4.49$; $\underline{p} < 0.0123$. Post-hoc Scheffé analysis showed that responses of 3rd- and 7th-grade teachers were significantly different ($\underline{p} < .05$). There were no significant differences between responses of 3rd- and 11th-grade teachers, or between responses of 7th- and 11th-grade teachers. Summary data can be found in Figure 28.

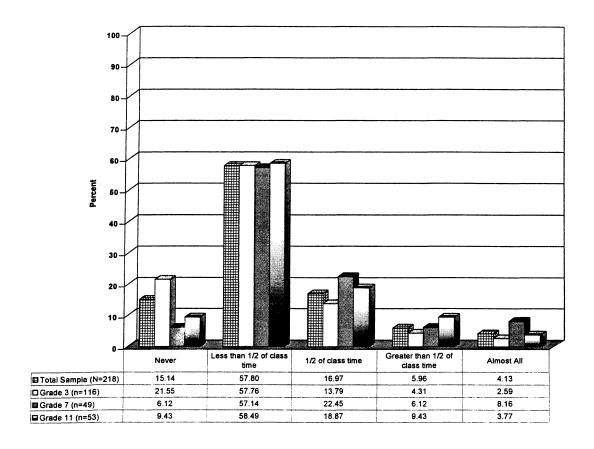


Figure 28. Response percentages, by grade, to Question 27: Peer review.

No significant relationship was found between responses to this question and geographic region.

Instructional Practices Factor Analysis

Introduction

Questions 11 through 27 asked teachers to estimate the frequency that students engage in the following activities in a typical class period:

- Q11: Listen to the teacher explain something.
- Q12: Read from a textbook.
- Q13: Maintain a portfolio of his/her own work.
- Q14: Work in pairs or small groups.
- Q15: Use the computer.
- Q16: Answer questions from a textbook or worksheet.
- Q17: Take a quiz or test.
- Q18: Take part in whole class discussion.
- Q19: Ask questions to improve understanding.
- Q20: Make predictions, guesses, or hypotheses.
- Q21: Make maps, drawings, or models to show ideas.
- Q22: Score or grade his/her own work using a scoring guide or rubric.
- Q23: Apply concepts discussed in class to everyday life.
- Q24: Read about class content from sources other than textbook.
- Q25: Write about class content.
- Q26: Keep a journal.
- Q27: Peer review.

The following Likert scale was used:

1 = Never 2 = Less than 1/2 of class period 3 = 1/2 of class period 4 = Greater than 1/2 of class period 5 = Almost all

Teacher response percentages are reported by question in the following table:

<u>Table 17.</u> Response percentages, for total sample, to Questions 11 through 27.

	Never	< 1/2 class	1/2 class	> 1/2 class	Almost all	
Question	1	2	<u>3</u>	<u>4</u>	<u>5</u>	<u>n</u>
11	0.5	52.1	25.1	9.1	13.2	219
12	5.5	65.3	19.2	4.6	5.5	219
13	33.2	47.5	4.6	4.1	10.6	217
14	0.9	50.2	32.9	11.4	4.6	219
15	18.3	69.3	5.5	1.8	5.0	218
16	6.8	61.6	22.4	6.4	2.7	219
17	3.2	75.7	11.0	4.6	55	218
18	0.5	40.2	30.6	18.7	10.0	219
19	0.5	51.1	24.2	14.6	9.6	219
20	1.8	548	24.2	14.6	4.6	219
21	5.9	65.3	20.1	6.8	1.8	219
22	31.5	54.3	7.3	5.0	1.8	219
23	2.7	43.8	25.1	20.1	8.2	219
24	5.9	49.8	23.7	13.7	6.8	219
25	8.2	47.9	27.9	11.9	4.1	219
26	30.1	47.5	9.6	3.7	9.1	219
27	15.1	58.0	16.9	5.9	4.1	219

Analysis of Instructional Practices

Items in this section were factor analyzed to determine possible connections among these instructional practices. Based on the factor analysis, items appeared to cluster into "communicating about communication arts," "performance-based activities," and "traditional individual activities." These clustered items were then analyzed for potential differences among the categorical variables. Statistically significant results are reported in Figures 29 through 33.

Communicating about Communication Arts. Multivariate significance was found for the item and grade (Wilks' Lambda F(10, 422) = 3.0862, p < 0.0008). The graph of the interaction is presented in Figure 29.

Q18: Take part in whole class discussion.

Q19: Ask questions to improve understanding.

Q20: Make predictions, guesses, or hypotheses.

Q23: Apply concepts discussed in class to everyday life.

Q25: Write about class content.

1 = Never 2 = Less than 1/2 of class period 3 = 1/2 of class period 4 = Greater than 1/2 of class period 5 = Almost all

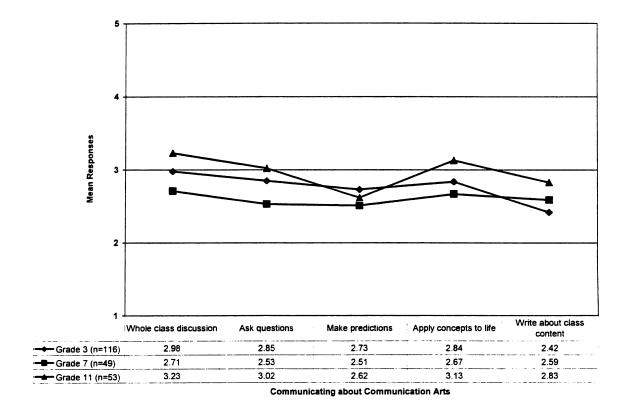


Figure 29. Mean responses for Questions 18, 19, 20, 23, and 25, by grade.

<u>Performance-based Activities.</u> Based on the factor analysis, five items were removed for multivariate analysis. Multivariate significance was found for the item and grade (Wilks' Lambda $\underline{F}(10, 418) = 3.8652$, $\underline{p} < 0.0001$). The graph of the interaction is presented in Figure 30.

Q13: Maintain a portfolio of his/her own work.

Q14: Work in pairs or small groups.

Q22: Score or grade his/her own work using a scoring guide or rubric.

Q26: Keep a journal.

Q27: Peer review.

1 = Never 2 = Less than 1/2 of class period 3 = 1/2 of class period 4 = Greater than 1/2 of class period 5 = Almost all

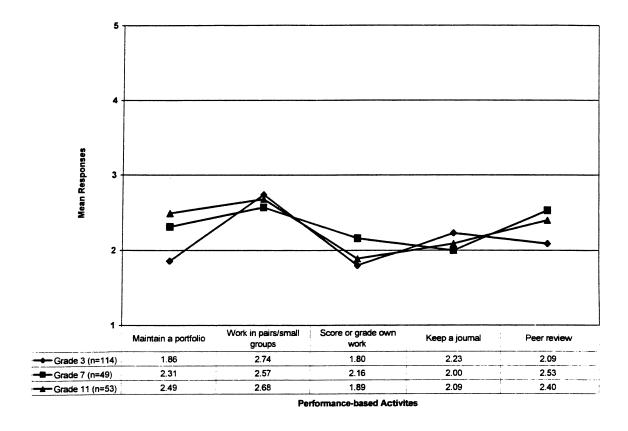


Figure 30. Mean responses for Questions 13, 14, 22, 26, and 27, by grade.

Multivariate significance was also found for the item and geographic region (Wilks' Lambda $\underline{F}(10, 416) = 1.9692$, $\underline{p} < 0.0352$). The graph of the interaction is presented in Figure 31.

1 = Never 2 = Less than 1/2 of class period 3 = 1/2 of class period 4 = Greater than 1/2 of class period 5 = Almost all

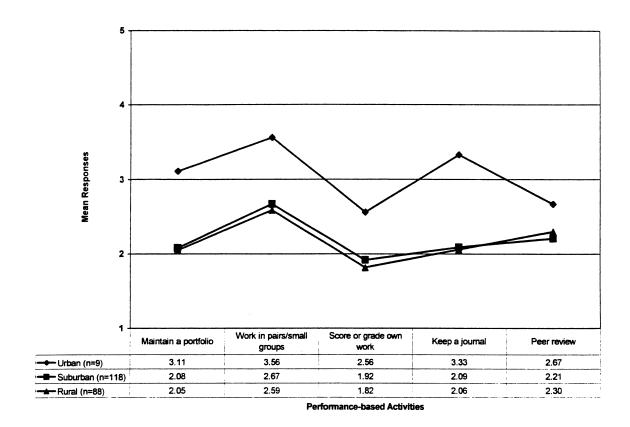


Figure 31. Mean responses for Questions 13, 14, 22, 26, and 27, by geographic region.

<u>Traditional Individual Activities.</u> Based on the factor analysis, four items were removed for multivariate analysis. Multivariate significance was found for the item and grade (Wilks' Lambda $\underline{F}(8, 422) = 2.3732$, $\underline{p} < 0.0165$). The graph of the interaction is presented in Figure 32.

- Q11: Listen to the teacher explain something.
- Q12: Read from a textbook.
- Q16: Answer questions from a textbook or worksheet.
- Q17: Take a quiz or test.

1 =Never 2 =Less than 1/2 of class period 3 = 1/2 of class period 4 =Greater than 1/2 of class period 5 =Almost all

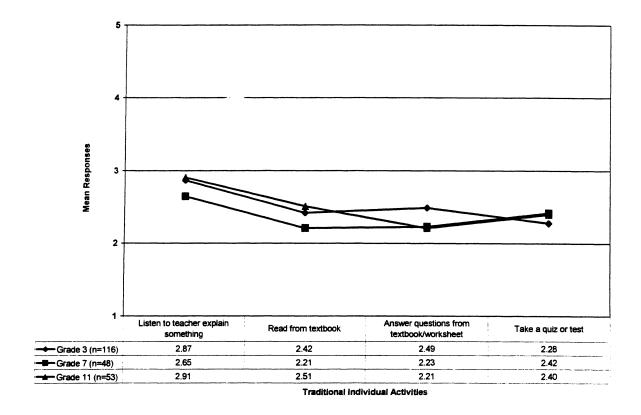


Figure 32. Mean responses for Questions 11, 12, 16, and 17, by grade.

Multivariate significance was also found for the item and geographic region (Wilks' Lambda $\underline{F}(8, 420) = 4.1304$, $\underline{p} < 0.0001$). The graph of the interaction is presented in Figure 33.

1 = Never 2 = Less than 1/2 of class period 3 = 1/2 of class period 4 = Greater than 1/2 of class period 5 = Almost all

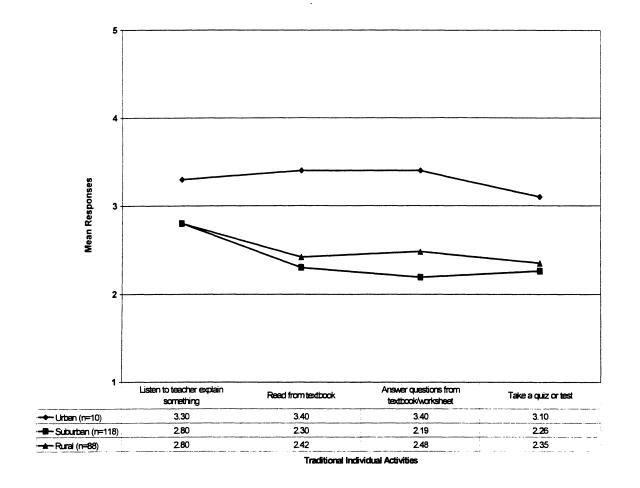


Figure 33. Mean responses for Questions 11, 12, 16, and 17, by geographic region.

Importance of Grading Procedures

Introduction

Questions 28 through 38 listed various types of assessment strategies used by teachers to ascertain levels of student performance. For each question, teachers were asked, "Indicate the relative importance you give to each of the following in determining grades for students." The Likert scale runs from 1 (Not important) to 5 (Important). Summary data of the responses to these questions for the entire teacher sample, as well as these data broken down by grade (3rd, 7th, and 11th grade) and geographic region (urban, suburban, and rural) can be found in Appendix B.

- Q28: Objective tests (e.g., multiple choice, true/false).
- Q29: Essay tests.
- Q30: Performance tasks or events.
- Q31: Observation of student behavior.
- Q32: Individual projects.
- Q33: Group projects.
- Q34: Homework assignments.
- Q35: Portfolios.
- Q36: Completion of written worksheets.
- O37: Individual seatwork.
- O38: Peer review.

Table 18 reports percentage response for the total sample in each of these areas.

Table 18. Response percentages, for total sample, to Questions 28 through 38.

Question	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>N</u>
28	10.2	13.9	7.9	44.9	23.1	216
29	6.0	8.3	7.4	41.2	37.0	216
30	0.9	3.7	10.2	37.5	47.7	216
31	9.3	13.9	14.8	31.0	31.0	216
32	0.0	6.0	12.5	45.4	36.1	216
33	4.6	9.7	20.8	47.2	17.6	216
34	2.8	19.8	19.4	37.3	20.7	217
35	15.3	18.1	27.8	25.9	13.0	216
36	7.4	11.1	16.1	44.7	20.7	217
37	5.6	11.6	18.1	45.4	19.4	216
38	18.4	17.1	23.0	31.8	9.7	217

As this table indicates, 48% of respondents report that performance tasks or events are important. Fifteen percent (15%) report that portfolios are not important.

Analysis of Grading Procedures

Items in this section were analyzed for principal components to determine possible connections among these grading procedures. Based on the factor analysis, items appeared to cluster into "performance-based assessments," and "traditional assessments." These clustered items were then analyzed for potential difference among the categorical variables. Statistically significant results are reported below in Figures 34 through 36.

<u>Performance-based Assessment Items</u>. Multivariate significance was found for the item and grade (Wilks' Lambda F(12, 410) = 6.1958, p = .0001). The graph of the interaction is presented in Figure 34.

Q30: Performance tasks or events.

Q31: Observation of student behavior.

Q32: Individual projects.

Q33: Group projects.

Q35: Portfolios.

Q38: Peer review.

1 = Not important 2 = Somewhat not important 3 = Neutral 4 = Somewhat important 5 = Very important

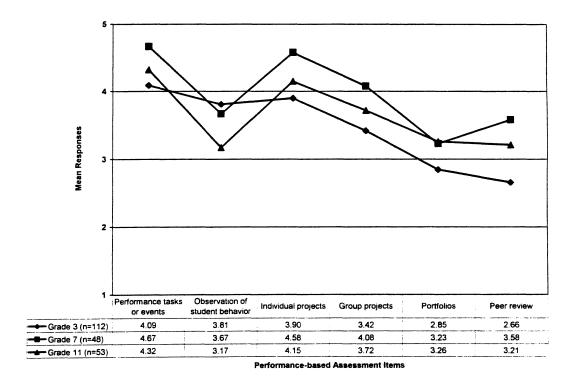


Figure 34. Mean responses for Questions 30, 31, 32, 33, 35, and 38, by grade.

Question 30, $\underline{F}(2, 210)$ =8.19, showed significance between grade levels and Tukey's HSD (\underline{p} < .05) indicated that a significant difference occurred between the answers of 3rd- and 7th-grade teachers with the 7th-grade teachers using performance tasks or events on which to base their grading significantly more than 3rd-grade teachers. Question 31, observation of student behavior, was also significant, $\underline{F}(2, 210)$ =4.56, and post-hoc analysis revealed that 11th-grade teachers use this procedure significantly less than the 3rd-grade teachers. The weight given to individual projects indicated significance, $\underline{F}(2, 210)$ =12.08, and in this case, the post-hoc analysis showed that both the 3rd- and 11th-grade teachers use this standard less than the 7th-grade teachers. The 7th-grade teachers also considered group projects more important than their 3rd-grade colleagues, $\underline{F}(2, 210)$ =7.60, and both 7th- and 11th-grade teachers reported peer review as more important than the 3rd-grade teachers, $\underline{F}(2, 210)$ =10.83.

Multivariate significance was also found for the item and geographic region (Wilks' Lambda $\underline{F}(12, 410) = 2.2696$, $\underline{p} = .0086$). The graph of the interaction is presented in Figure 35.

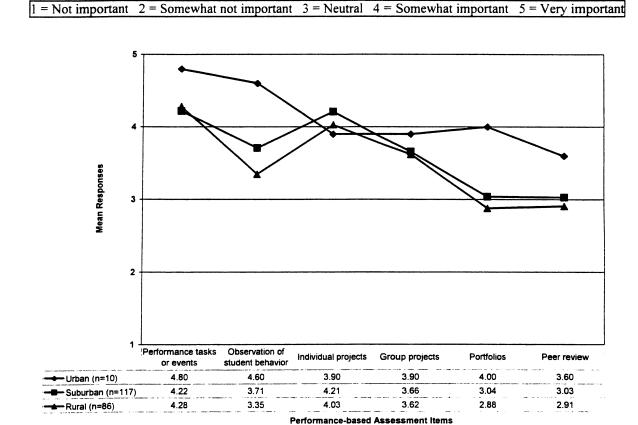


Figure 35. Mean responses for Questions 30, 31, 32, 33, 35, and 38, by geographic region.

Traditional Assessment Items. Based on the factor analysis, three items were removed for multivariate analysis.

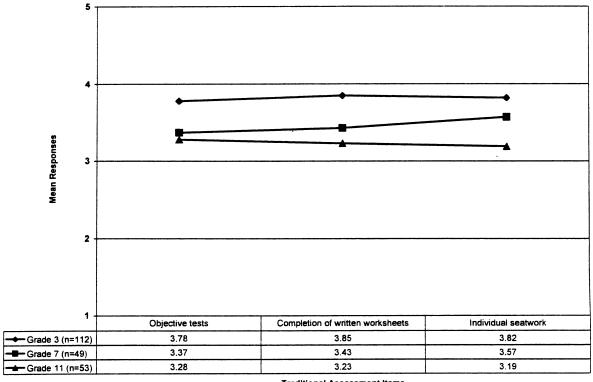
Q28: Objective tests (e.g. multiple choice, true/false).

Q36: Completion of written worksheets.

Q37: Individual seatwork.

Multivariate significance was found for the item and grade (Wilks' Lambda $\underline{F}(6, 418) =$ 2.9141, p = .0085). The graph of the interaction is presented in Figure 36.

1 = Not important 2 = Somewhat not important 3 = Neutral 4 = Somewhat important 5 = Very important



Traditional Assessment Items

Figure 36. Mean responses for Questions 28, 36, and 37, by grade.

Each of these questions displayed significant difference by grade level. The F values were: objective tests, $\underline{F}(2, 211)=3.55$; completion of written worksheets $\underline{F}(2, 211)=6.16$; individual seatwork, F(2, 211)=6.3. Tukey's HSD (p < .05) showed that in all three questions, the 3rd-grade teachers reported the item as being significantly more important for them in determining grades than the 11th-grade teachers.

Influence of Teacher Preparation

Introduction

Questions 39 through 49 asked teachers to indicate how well prepared they were to perform various activities. For each question, teachers were asked, "Indicate how well prepared you are to perform the following activities." The Likert-scale runs from 1 (Not well prepared) to 5 (Very well prepared). Summary data of the responses to these questions for the entire teacher sample, as well as these data broken down by grade (3rd, 7th, and 11th grade) and geographic region (urban, suburban, and rural) can be found in Appendix B.

- Q39: Use cooperative learning groups.
- Q40: Use computers as an integral part of instruction.
- Q41: Integrate this subject with other subject areas.
- Q42: Use a variety of assessment strategies.
- Q43: Help students document and evaluate their work through portfolios.
- O44: Teach groups that vary in ability.
- Q45: Teach students from a variety of cultural backgrounds.
- Q46: Teach students who have limited English proficiency.
- Q47: Teach students who have learning disabilities.
- Q48: Encourage participation of females.
- Q49: Involve parents in the education of their children.

Table 19 reports mean response for the total sample in each of these areas.

Table 19. Mean responses, for total sample, to Questions 39 through 49.

Question	Mean	<u>SD</u>	<u>n</u>	
39	3.72	0.99	219	
40	3.02	1.23	218	
41	3.78	1.00	219	
42	3.78	0.98	219	
43	2.60	1.24	218	
44	3.78	0.98	219	
45	3.27	1.15	219	
46	1.93	1.13	219	
47	3.18	1.17	219	
48	4.38	0.80	217	
49	3.73	1.01	219	

Analysis of Teacher Preparation

Items in this section were analyzed for principal components to determine possible connections among these areas. Based on the factor analysis, items cluster into only one factor.

Instructional Influences

Introduction

Questions 50 through 59 asked teachers to indicate which of the items influenced course content. For each question, teachers were asked, "Indicate the degree to which each of the following influences the content you teach in this class." The Likert scale runs from 1 (No influence) to 5 (Very strong influence). Summary data of the responses to these questions for the entire teacher sample, as well as these data broken down by grade (3rd, 7th, and 11th grade) and geographic region (urban, suburban, and rural) can be found in Appendix B.

- Q50: Missouri's education curriculum framework or guidelines.
- Q51: Your district's curriculum framework or guidelines.
- Q52: Textbook.
- Q53: Missouri's State Assessment Program.
- Q54: Education standards or curriculum guidelines from national organizations.
- Q55: Your understanding of what motivates your students.
- Q56: Available equipment and supplies.
- Q57: Student aptitude.
- O58: Practices of other teachers.
- Q59: Parents.

Table 20 reports percentage response for the total sample in each of these areas.

Table 20. Response percentages, for total sample, to Questions 50 through 59.

Question	1	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>n</u>
50	2.8	4.6	18.3	39.9	34.4	218
51	0.9	2.3	6.9	31.7	58.3	218
52	12.8	21.6	32.1	25.7	7.8	218
53	4.6	5.0	24.3	32.6	33.5	218
54	13.3	33.9	32.6	14.7	5.5	218
55	0.5	2.3	10.1	42.2	45.0	218
56	1.8	8.8	28.1	39.6	21.7	217
57	2.8	5.0	27.5	39.9	24.8	218
58	6.4	28.4	39.0	17.9	8.3	218
59	12.8	33.5	39.0	10.6	4.1	218

Analysis of Instructional Influences

Items in this section were analyzed for principal components to determine possible connections among these instructional influences. Based on the factor analysis, items clustered into "externally mandated," and "local considerations." These clustered items were then analyzed for potential differences among the categorical variables. Statistically significant results are reported in Figures 37 through 40.

Externally Mandated Items. Based on the factor analysis, three items were removed for multivariate analysis. Multivariate significance was found for the item and grade, (Wilks' Lambda F(6, 422) = 4.9083, p = .0001). The graph of the interaction is presented in Figure 37.

The scale is 1 (No influence) to 5 (Very strong influence).

Q50: Missouri's communication arts education curriculum framework or guidelines.

O51: Your district's curriculum framework or guidelines.

O53: Missouri's State Assessment Program.

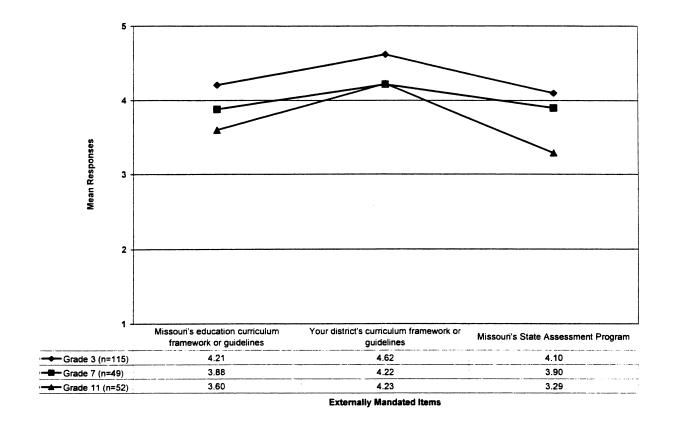


Figure 37. Mean responses for Questions 50, 51, and 53, by grade.

Overall, teachers indicate that the Missouri curriculum framework or guidelines, district curriculum framework or guidelines, and the Missouri State Assessment influence their instruction, with the 3rd-grade teachers influenced most and the 11th-grade teachers influenced least. Each of these questions was significant by grade level. Tukey's HSD (p < .05) for Question 50, F(2, 213)=7.75, showed that Missouri's curriculum framework or guidelines, influences the 3rd-grade teachers more than the 11th-grade teachers. Post-hoc analysis also revealed that in Question 51, F(2, 213)=6.75, 3rd-grade teachers are more influenced by the district's curriculum framework or guidelines than either 7th- or 11th-grade teachers. We also found significant difference on Question 53, F(2, 213)=10.80, where Tukey's HSD revealed that both 3rd- and 7th-grade teachers are more influenced by Missouri's State Assessment Program than are 11th-grade teachers.

Multivariate significance was also found for the item and geographic region, (Wilks' Lambda $\underline{F}(6, 420) = 3.9077$, $\underline{p} = .0008$). The graph of the interaction is presented in Figure 38.

The scale is 1 (No influence) to 5 (Very strong influence).

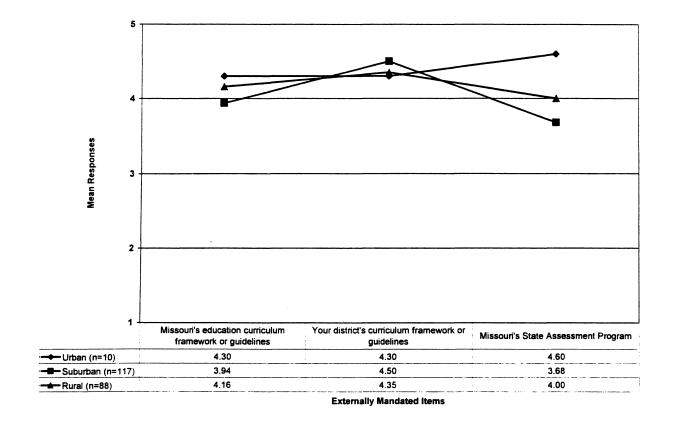


Figure 38. Mean responses for Questions 50, 51, and 53, by geographic region.

<u>Local Consideration Items.</u> Based on the factor analysis, five items were removed for multivariate analysis. Multivariate significance was found for the item and grade (Wilks' Lambda F(10, 418) = 2.9716, p < 0.0013). The graph of the interaction is presented in Figure 39.

- Q55: Your understanding of what motivates your students.
- Q56: Available equipment and supplies.
- Q57: Student aptitude.
- Q58: Practices of other teachers.
- Q59: Parents.

The scale is 1 (No influence) to 5 (Very strong influence).

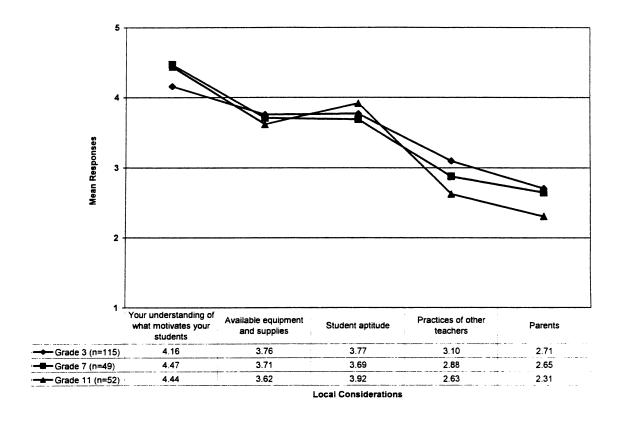


Figure 39. Mean responses to Questions 55, 56, 57, 58, and 59, by grade.

Questions 55, $\underline{F}(2, 213)=4.14$, 57, $\underline{F}(2, 210)=3.98$, and 58, $\underline{F}(2, 210)=3.19$, were all significant by grade level. Tukey's HSD ($\underline{p} < .05$) revealed that teacher understanding of what motivates their students influences 7th-grade teachers more than it influences 3rd-grade teachers, that the practices of other teachers influences 3rd-grade teachers more than 11th-grade teachers, and that parents influence 3rd-grade teachers significantly more than 11th-grade teachers.

Multivariate significance was also found for the item and geographic region (Wilks' Lambda $\underline{F}(10,416) = 1.8735$, $\underline{p} = .0471$). The graph of the interaction is presented in Figure 40.

The scale is 1 (No influence) to 5 (Very strong influence).

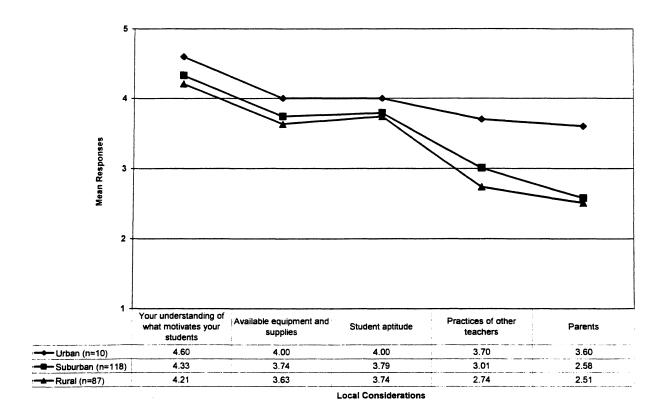


Figure 40. Mean responses to Questions 55, 56, 57, 58, and 59, by geographic region.

The influence of other teachers and parents are both reported below "moderate influence" for suburban and rural teachers. Care should be used when interpreting this statistic because of the small urban sample.

Use of Computers and Technological Equipment

Introduction

With the adoption of the Show-Me Standards, technology and the ability to use technology became integrated within the guiding standards for the state of Missouri. Specifically, the Show-Me Standards address the use of technology in Goal 1 and Goal 2 of the standards.

Goal 1, Process Standard 4: Use technological tools and other resources to locate, select and organize information.

Goal 2, Process Standard 7: Use technological tools to exchange information and ideas.

The teacher survey addressed several issues related to technology, both in terms of availability and use. Responses to the items related to technology were based on a sample size of 219.

The questions were devised to provide an overview of the types of technology utilized in instruction. The types of technology included overhead projector, videotape players, and computers. Table 21 reports percentage responses for types of technology used in the classroom.

Q60: An overhead projector is used in instruction.

Q61: A videotape player is used in instruction.

Q62: A computer is used by you in instruction.

Q63: A computer is used by the students.

<u>Table 21.</u> Response percentages, for total sample, to Questions 60 through 63.

	<u>Not</u> <u>available</u>	Available, but not used	<u>Used</u> weekly	<u>Used</u> bimonthly	<u>Used</u> monthly	<u>n</u>
Overhead projector	5.0	19.7	57.3	9.2	8.7	218
Videotape player	1.4	17.8	20.1	16.0	34.7	219
Computer used by instructor	15.5	22.8	38.8	10.0	12.8	219
Computer used by students	7.8	4.6	58.0	11.9	17.8	219

Results for Questions 60-63 were analyzed using one-way MANOVA, between-groups design. This analysis revealed a significant multivariate effect for grade, Wilks' Lambda = 0.8517, F(8, 422) = 4.41; p < 0.0001.

For items that showed statistical significance by the categorical variables, the test results will be reported and the percent of teachers who responded to each choice on the Likert scale (1, 2, 3, 4, or 5) will be represented in graphical and tabular form. Items that were not statistically significant will not be reported.

Question 63 asked teachers about the availability and use of a computer by students in the classroom. Results were analyzed using a one-way ANOVA, between-groups design. This analysis revealed a significant difference for grade, $\underline{F}(2, 214) = 11.79$; $\underline{p} < 0.0001$. Post-hoc Scheffé analysis showed that responses of 3rd- and 7th-grade teachers and responses of 3rd- and 11th-grade teachers were significantly different ($\underline{p} < .05$). Response percentages are displayed in Figure 41.

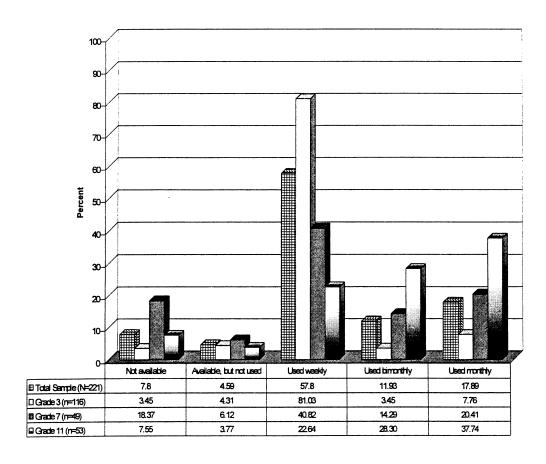


Figure 41. Response percentages, by grade, to Question 63: A computer is used by the students.

Availability of Technological Resources

To ascertain the availability of technological resources, respondents to the survey questions related to technology had a "not available" option and an option for "available, but not used." Reports of the findings in these areas are given below.

Not available. Table 22 indicates the percentage responses, for the entire sample, of those teachers indicating technological resources are not available for their use.

<u>Table 22.</u> Responses, for total sample, of teachers stating technological resources are *not available*.

	Frequency	Percent	<u>n</u>
Overhead projector	11	5.0	218
Videotape player	3	1.4	219
Computer used by instructor	34	15.5	219
Computer used by students	17	7.8	219

Overall, 15.5% of the teachers indicate that they do not have access to a computer for use in instruction and 8% of teachers indicate that their students do not have access to a computer. Figure 42 shows the breakdown by grade level.

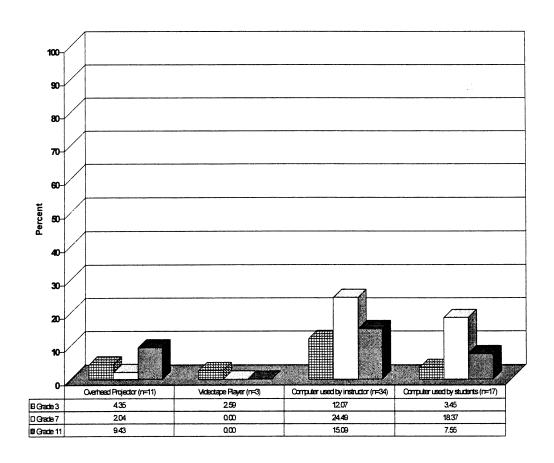
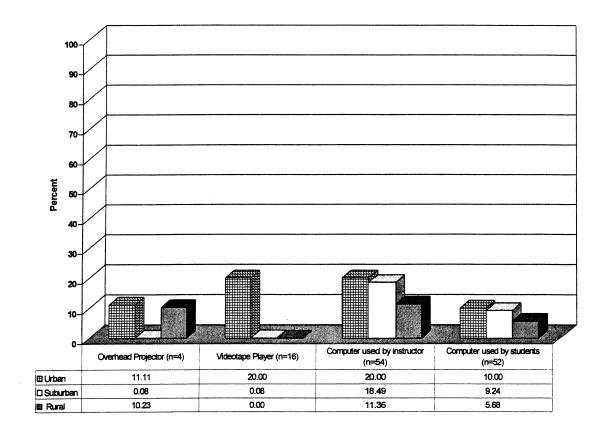


Figure 42. Percentage responses of teachers stating technological resources are *not available*, by grade.

Geographic location was another categorical variable examined. Availability of resources did vary across the types of technology. Figure 43 shows the percent response of teachers indicating lack of availability of resources.



<u>Figure 43</u>. Percentage responses of teachers stating technological resources are *not available*, by geographic location.

Care should be used when interpreting this statistic because of the small urban sample.

<u>Available But Not Used.</u> Table 23 indicates the percentage responses, for the entire sample, of those teachers indicating technological resources are available but are not used for instruction.

<u>Table 23.</u> Responses, for total sample, of teachers stating technological resources are *available but not used*.

	Frequency	<u>Percent</u>	<u>n</u>
Overhead projector	43	19.7	218
Videotape player	39	17.8	219
Computer used by instructor	50	22.8	219
Computer used by students	10	4.6	219

Overall, nearly 18% of the teachers indicate that they have access to a videotape player, but do not use it and 23% indicated that a computer was available but not used in instruction. It should be noted that reasons why teachers were not utilizing this type of equipment were not explored in this particular survey. Certainly, the number and location of computers would have an influence on how well an instructor could incorporate computer use within the classroom setting. Another important characteristic is teacher training and familiarity with computers.

Use of Technology in Missouri Classrooms

Overhead Projectors. Overall, teachers reported frequent use of an overhead projector. Fifty-seven percent (57%) of teachers report using an overhead projector weekly. Use of the overhead projector by teachers at all grade levels tends to be extensive, with all grade levels reporting frequent use by two-thirds or more of respondents.

<u>Videotape Players.</u> Videotape players were not available for only 1.4% of the sample and 18% of the sample indicated that videotape players were available but not used. Twenty percent (20%) of respondents report using a videotape player weekly.

<u>Computer.</u> Fifteen percent (15%) of responding teachers do not have access to computers for instructional use. Computers are available but not used by 23% of respondents, but 39% report use of computers weekly by the instructor and 58% report weekly use of computers by students.

Teacher Beliefs

Introduction

Questions 64 through 88 listed various statements about the general learning environment. A Likert-scale format asked respondents to indicate the degree to which they agreed or disagreed with the statements. A second set of questions, 103 through 116, asked teachers to respond to statements that were specific to communication arts, using the same Likert scale.

- Q64: Student work areas should be flexible to accommodate a variety of learning activities, whether it be working individually or in small groups.
- Q65: Portfolio assessment is more useful than traditional tests.
- Q66: Instruction should be composed of projects and centers.
- Q67: Subject matter should be integrated into all areas of the curriculum.
- O68: Novel solutions to problems should be encouraged.
- Q69: Most of teacher preparation time should be used to prepare the classroom for hands-on activities.
- Q70: A test is the most appropriate way to gauge a student's achievement.
- Q71: The teacher's part in the attainment of subject matter is to diagnose and correct errors.
- Q72: Assessment should be integrated into the learning and instructional process.
- Q73: The teacher should primarily lead whole group instruction.
- Q74: Teachers facilitate students finding their own meaning in experiences and interpretations of their environment.
- Q75: It is important to have numerical scores so that a student's progress can be compared to that of other students.
- Q76: Teachers should impart knowledge to students.
- O77: Students should be left to choose or form their own learning goals and objectives.
- Q78: A quiet classroom is more productive than a busy and noisy room.
- Q79: Teachers construct the correct understanding for students.
- Q80: Learning should consist primarily of hands-on activities.
- Q81: Students need to learn basic skills before they can learn higher order thinking skills.
- Q82: It is best when only one activity is taking place at one time in the classroom.
- Q83: One of the main purposes of assessment is to gauge whether or not a student has mastered the material to know whether a student can move on to the next level of instruction.
- Q84: Teachers and curriculum developers should decide what children learn and how they learn it.
- Q85: Teachers should imbed subject matter in authentic experiences.
- Q86: The best way for students to show they have mastered the subject matter is to demonstrate that knowledge.
- O87: Instruction should be divided into separate subject areas.
- Q88: Instruction and assessment should be separate otherwise teaching to the test will occur.
- O103: Students learn communication arts best in classes with students of similar abilities.
- Q104: It is important for students to learn basic skills (e.g. letter recognition, spelling, grammar) before learning advanced concepts and principles (e.g. reading, writing, public speaking).

- Q105: Activity-driven communication arts classes are more effective than non-activity-driven classes.
- Q106: I enjoy teaching communication arts.
- Q107: I feel supported by colleagues to try out new ideas in teaching communication arts.
- Q108: I receive support from the school administration for teaching communication arts.
- Q109: Communication arts teachers in this school regularly share ideas.
- Q110: Communication arts teachers in this school regularly observe each other teaching classes as part of sharing and improving instruction.
- Q111: Activity-based communication arts experiences aren't worth the time and expense.
- Q112: I am required to follow rules at this school that conflict with my best professional judgment about teaching and learning communication arts.
- Q113: Most communication arts teachers in this school contribute actively in communication arts curriculum development.
- Q114: I consider myself a "master" teacher.
- Q115: I feel that I have many opportunities to learn new things in my present job.
- Q116. I have time during the regular school week to work with my peers on curriculum.

Tables 24 and 25 report mean responses for the total sample in each of these areas. The Likert scale runs from 1 (Strongly disagree) to 5 (Strongly agree).

<u>Table 24.</u> Mean responses, for total sample, to Questions 64 through 88.

Question	Mean	SD	<u>n</u>
64	4.5	0.73	219
65	3.23	0.96	219
66	3.28	0.89	218
67	4.28	0.65	218
68	4.27	0.63	219
69	3.42	0.93	218
70	2.39	0.86	217
71	268	0.98	215
72	4.22	0.61	218
73	2.91	0.92	216
74	4.10	0.65	218
75	2.83	1.05	218
76	3.69	0.93	216
77	2.42	0.87	218
78	2.39	0.95	217
79	2.70	0.96	216
80	3.30	0.86	217
81	3.66	1.15	218
82	2.54	0.89	217
83	3.78	0.79	218
84	3.17	1.06	217
85	4.15	0.61	217
86	4.32	0.60	219
87	2.53	0.90	217
88	2.47	0.87	217

<u>Table 25.</u> Mean responses, for total sample, to Questions 103 through 116.

Question	Mean	<u>SD</u>	<u>n</u>
103	2.79	1.11	218
104	3.53	1.24	218
105	3.92	0.83	218
106	4.37	0.77	218
107	4.21	0.83	218
108	3.99	1.00	218
109	3.84	1.03	217
110	2.06	0.97	218
111	1.73	0.75	218
112	1.94	1.05	218
113	3.41	1.07	218
114	3.52	1.07	2.16
115	4.09	0.85	218
116	2.34	1.26	218

Analysis of Teacher Beliefs

Items in this section were subjected to an exploratory factor analysis using squared multiple correlations as prior communality estimates. The principal factor method was used to extract the factors, and this was followed by a promax (oblique) rotation. A scree test suggested four meaningful factors, so only these factors were retained for rotation.

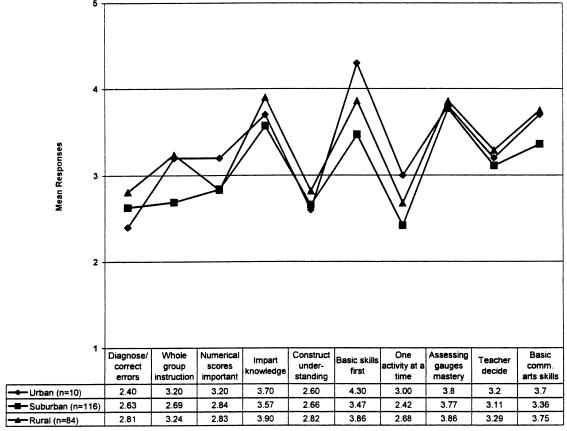
In interpreting the rotated factor pattern, an item was said to load on a given factor if the factor loading was .40 or greater for that factor, and was less than .40 for any other. Using these criteria, ten items were found to load on the first factor, which was subsequently labeled as "Factor 1: Teacher as Expert Facilitator within Standardized Practice." Seven items loaded on the second factor, which was labeled "Factor 2: Collaborative Instructional Design." The third factor, subsequently labeled "Factor 3: Activity-Based Learning," had four items that loaded on it. Finally, seven items loaded on the fourth factor, which was labeled "Factor 4: Active Teacher Involvement in a Culture of Practice."

Each factor was then analyzed using one-way MANOVA, between-groups design. Each of these analyses is reported below.

Factor 1: Teacher as Expert Facilitator within Standardized Practice. Based on the factor analysis, the following ten items were removed for multivariate analysis, which revealed a significant multivariate effect for geographic region (Wilks' Lambda F(20, 396) = 1.8508, p < 0.0146). The graph of the interaction is presented in Figure 44.

- Q71: The teacher's part in the attainment of subject matter is to diagnose and correct errors.
- Q73: The teacher should primarily lead whole group instruction.
- Q75: It is important to have numerical scores so that a student's progress can be compared to that of other students.
- Q76: Teachers should impart knowledge to students.
- Q79: Teachers construct the correct understanding for students.
- Q81: Students need to learn basic skills before they can learn higher order thinking skills.
- Q82: It is best when only one activity is taking place at one time in the classroom.
- O83: One of the main purposes of assessment is to gauge whether or not a student has mastered the material to know whether a student can move on to the next level of instruction.
 - 34: Teachers and curriculum developers should decide what children learn and how they learn it.
- Q104: It is important for students to learn basic skills (e.g. letter recognition, spelling, grammar) before learning advanced concepts and principles (e.g. reading, writing, public speaking).

The scale is 1 (Strongly disagree) to 5 (Strongly agree).



Teacher as Expert Facilitator

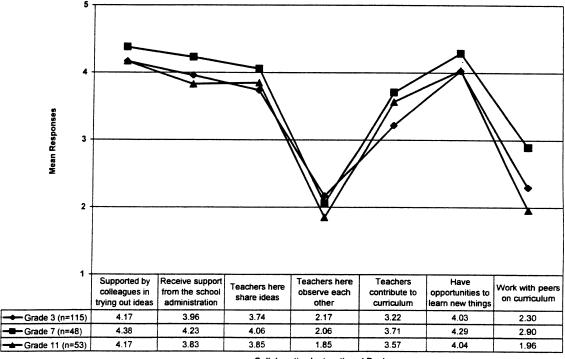
<u>Figure 44.</u> Mean responses for Questions 71, 73, 75, 76, 79, 81, 82, 83, 84, and 104, by geographic region.

Care should be used when interpreting this statistic because of the small urban sample.

<u>Factor 2: Collaborative Instructional Design.</u> Based on the factor analysis, the following seven items were removed for multivariate analysis, which revealed a significant multivariate effect for grade (Wilks' Lambda F(14, 414) = 2.2727, p < 0.0054). The graph of the interaction is presented in Figure 45.

- Q107: I feel supported by colleagues to try out new ideas in teaching communication arts.
- Q108: I receive support from the school administration for teaching communication arts.
- Q109: Communication arts teachers in this school regularly share ideas.
- Q110: Communication arts teachers in this school regularly observe each other teaching classes as part of sharing and improving instruction.
- Q113: Most communication arts teachers in this school contribute actively in communication arts curriculum development.
- Q115: I feel that I have many opportunities to learn new things in my present job.
- Q116. I have time during the regular school week to work with my peers on curriculum.

The scale is 1 (Strongly disagree) to 5 (Strongly agree).



Collaborative Instructional Design

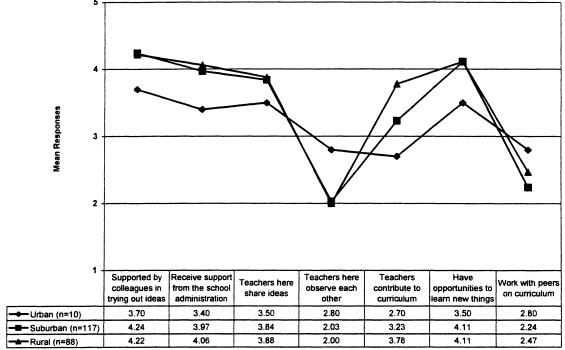
Figure 45. Mean responses for Questions 107, 108, 109, 110, 113, 115, and 116, by grade.

Two of these questions revealed individual significant differences by grade level. Tukey's HSD (p < .05) revealed that 7th-grade teachers agreed more strongly than 3rd-grade teachers on Question 113, $\underline{F}(2, 213)$ =4.54, which states that communication arts teachers in the teacher's school contribute actively in communication arts curriculum development. The same post-hoc test revealed that 7th-grade teachers also agree more strongly than either 3rd- or 11th-

grade teachers on Question 116, $\underline{F}(2, 213)=7.52$, which states that they have time during the regular school week to work with peers on curriculum.

Analysis also revealed a significant multivariate effect for geographic region (Wilks' Lambda $\underline{F}(14, 412) = 3.5373$, $\underline{p} < 0.0001$). The graph of the interaction is presented in Figure 46.

The scale is 1 (Strongly disagree) to 5 (Strongly agree).



Collaborative Instructional Design

Figure 46. Mean responses for Questions 107, 108, 109, 110, 113, 115, and 116, by geographic region.

Care should be used when interpreting this statistic because of the small urban sample.

<u>Factor 3: Activity-based Learning.</u> Based on the factor analysis, the following four items were removed for multivariate analysis, which revealed no significance for the categorical variables.

Q66: Instruction should be composed of projects and center	Q66:	Instruction	should be	composed	of projects	and centers.
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- Q69: Most of teacher preparation time should be used to prepare the classroom for hands-on activities.
- Q80: Learning should consist primarily of hands-on activities.
- Q105: Activity-driven communication arts classes are more effective than non-activity-driven classes.

<u>Factor 4: Active Teacher Involvement in a Culture of Practice.</u> Based on the factor analysis, the following seven items were removed for multivariate analysis, which showed no significance for the categorical variables.

- Q67: Subject matter should be integrated into all areas of the curriculum.
- Q68: Novel solutions to problems should be encouraged.
- Q72: Assessment should be integrated into the learning and instructional process.
- Q74: Teachers facilitate students finding their own meaning in experiences and interpretations of their environment.
- Q85: Teachers should imbed subject matter in authentic experiences.
- Q106: I enjoy teaching communication arts.
- Q114: I consider myself a "master" teacher.

Attitudes Toward the Missouri Assessment Program

Questions 89 through 93 asked teachers to respond to questions about the Missouri Assessment Program. A Likert-scale format asked respondents to indicate the degree to which they agreed or disagreed with the statements.

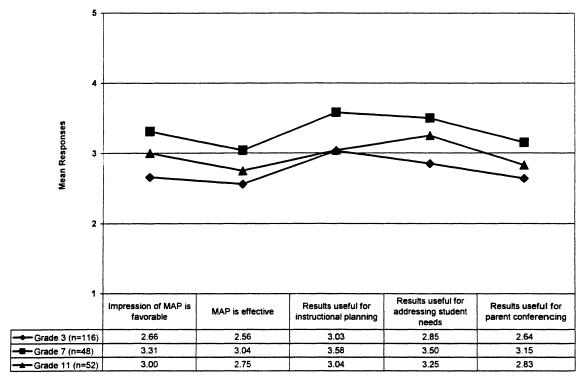
- Q89: My overall impression of the new state assessment program is favorable.
- Q90: The state assessment program is effective.
- Q91: The new assessment results will be useful for instructional planning.
- Q92: The new assessment results will be useful for addressing student needs.
- Q93: The new assessment results will be useful for parent conferencing.

Table 26 reports mean responses for the total sample in each of these areas. The Likert scale runs from 1 (Strongly disagree) to 5 (Strongly agree).

<u>Table 26.</u> Mean response, for total sample, to Questions 89 through 93.

Question	Mean	<u>SD</u>	<u>n</u>
89	2.88	1.10	218
90	2.71	0.91	217
91	3.16	1.03	217
92	3.10	1.04	217
93	2.80	1.01	217

Results were analyzed using one-may MANOVA, between-groups design across each of the categorical variables: grade and geographic region. The analysis revealed a significant multivariate effect for grade (Wilks' Lambda $\underline{F}(10, 418) = 3.0961$, $\underline{p} = .0008$). The graph of the interaction is presented in Figure 47.



Statements About the MAP

Figure 47. Mean responses for Questions 89, 90, 91, 92, and 93, by grade.

Results of individual questions were analyzed using a one-way ANOVA, between-groups design.

Question 89: This analysis revealed a significant difference for grade, $\underline{F}(2, 213) = 6.73$; $\underline{p} < 0.0015$. Post-hoc Scheffé analysis showed that responses of 3rd- and 7th-grade teachers were significantly different ($\underline{p} < 0.5$), with 7th-grade teachers reporting that their impression of the MAP is more favorable than the 3rd-grade teachers. There were no significant differences between responses of 3rd- and 11th-grade teachers, or between responses of 7th- and 11th-grade teachers.

Question 90: This analysis revealed a significant difference for grade, $\underline{F}(2, 213) = 4.92$; $\underline{p} < 0.0081$. Post-hoc Scheffé analysis showed that responses of 3rd- and 7th-grade teachers were significantly different ($\underline{p} < 0.5$), with the 7th-grade teachers reporting that the MAP is effective significantly more than the 3rd-grade teachers. There were no significant differences between responses of 3rd- and 11th-grade teachers, or between responses of 7th- and 11th-grade teachers.

Question 91: This analysis revealed a significant difference for grade, $\underline{F}(2, 213) = 5.48$; $\underline{p} < 0.0048$. Post-hoc Scheffé analysis showed that responses of 3rd- and 7th-grade teachers and responses of 7th- and 11th-grade teachers were significantly different ($\underline{p} < 0.5$), with the 7th-grade teachers reporting that the results are useful for instructional planning significantly more than either the 3rd- or the 11th-grade teachers. There was no significant difference between responses of 3rd- and 11th-grade teachers.

Question 92: This analysis revealed a significant difference for grade, $\underline{F}(2, 213) = 7.83$; $\underline{p} < 0.0005$. Post-hoc Scheffé analysis showed that responses of 3rd- and 7th-grade teachers were significantly different ($\underline{p} < 0.5$), with the 7th-grade teachers reporting that the results of the MAP are useful for addressing student needs significantly more than 3rd-grade teachers. There were no significant differences between responses of 3rd- and 11th-grade teachers, or between responses of 7th- and 11th-grade teachers.

Question 93: This analysis revealed a significant difference for grade, $\underline{F}(2, 213) = 4.47$; $\underline{p} < 0.0125$. Post-hoc Scheffé analysis showed that responses of 3rd- and 7th-grade teachers were significantly different ($\underline{p} < 0.5$), with the 7th-grade teachers reporting that the MAP results are useful for parent conferencing significantly more than the 3rd-grade teachers. There were no significant differences between responses of 3rd- and 11th-grade teachers, or between responses of 7th- and 11th-grade teachers.

Results were further analyzed across the variables that dealt with curriculum development. Groups were divided by their response of yes or no on the following items:

- Q100: Have you served on a school or district communication arts curriculum development committee?
- Q101: Have you served on a school district or state assessment development or selection committee?
- Q102: Have you participated in a formal performance assessment scoring activity beyond your own classroom?

Resulting groups were then compared across Questions 89-93. The analysis revealed no significant differences

Another section of the survey, Questions 117 through 121, queried teachers about their impression of the assessment itself. The scale was 1 (Poor) to 5 (Excellent). Table 27 reports the mean responses for each question.

O117: Instructions for the test.

Q118: Test materials.

Q119: Amount of time needed for test preparation and administration.

O120: Timeliness of results.

Q121: Format.

Table 27. Mean responses, for total sample, to Questions 117 through 121.

Question	Mean	SD	<u>n</u>
117	3.14	1.05	132
118	3.05	1.09	132
119	2.63	1.18	131
120	2.25	1.12	124
121	2.63	1.10	123

Results were analyzed using one-may MANOVA, between-groups design across each of the categorical variables: grade and geographic region. The analysis failed to reveal a significant multivariate effect for any of these variables.

Open-Ended Insert Responses

Introduction

Part 3 of the survey, included on a separate sheet, was designed to elicit open-ended responses to several questions regarding class time and the new assessment. This part was divided into three sections. Section 1 asked teachers to indicate the content emphasis and length of their current unit. Section 2 required teachers to indicate the percentage of class time spent on different types of classroom activities. Section 3 consisted of a series of three questions that asked teachers to comment on the communication arts assessment. In this section, they were asked to indicate the types of professional development they would need to interpret the results of the new assessment, along with aspects of the new assessment they liked, disliked, or would change.

Of the 219 surveys returned to CLEAR, 216 responded to at least one question in Part 3. Many of the teachers limited their response to Sections 1 and 2, while others commented only in

the open-ended questions of Section 3. Specifically, 216 teachers responded to Section 1 and 219 teachers responded to Section 2. One hundred and sixty-eight (168) teachers responded to Section 3. Results from the analysis of these data are reported in the following section. Each question was analyzed and is reported separately.

Part 3, Section 1 – Current Unit

Question 1: Content emphasis of current unit. Tables 28 and 29 display the content emphases reported across categorical variables. Respondents were asked to indicate the content emphasis of their current unit, by circling all applicable responses.

Table 28. Number of respondents reporting units being taught, categorized by grade.

		Grade	
	3rd	7th	11th
Readings skills	103	34	34
Oral communication	35	18	18
Written communication	100	41	36
Research and analytical skills	34	18	35
Media awareness	14	8	12
Integrated curriculum	54	16	7
Other	5	7	5

The "other" units included: writing, literature interpretation, MMAT review, current events, computer presentation skills, integrating technology, American literature survey, book writing and publishing, group work, individual project, workplace application, and interviewing/research for biography.

Table 29. Number of respondents reporting units being taught, categorized by geographic region.

	Geographic region		
	Urban	Suburban	Rural
Readings skills	8	95	67
Oral communication	3	45	22
Written communication	8	95	74
Research and analytical skills	2	54	31
Media awareness	3	23	8
Integrated curriculum	5	44	27
Other	0	13	4

Question 2: Length of current unit. Respondents were asked to indicate the length of their current unit. These answers were combined with results from Questions 1, 2, and 3 on the survey. Tables 30 and 31 display the results by grade and by geographic region.

<u>Table 30</u>. Means of class scheduling information, categorized by grade.

			Grade	
		3rd	7th	11th
Block scheduling (n=67)	n	17	24	26
	Length of class period*	3.18	2.27	3.00
	Number of times class meets per week ¹¹	5.00	4.35	3.00
	Length of current unit [△]	2.81	2.92	2.36
	n	94	25	27
No block scheduling (n=146)	Length of class period*	3.00	2.08	2.11
	Number of times class meets per week ¹	4.97	5.00	4.81
	Length of current unit [△]	2.43	2.58	2.41

^{*} Scale: 1 = Under 40 min., 2 = 40-60 min., 3 = 61-90 min., 4 = 91-120 min., 5 = More than 120 min.

[□] Scale: 1 = One time, 2 = Two times, 3 = Three times, 4 = Four times, 5 = Five times

 $[\]triangle$ Scale: 1 = One week, 2 = Two-Three weeks, 3 = One month, 4 = More than one month.

Table 31. Means of class scheduling information, categorized by geographic region.

			Region	
		Urban	Suburban	Rural
	n	1	39	26
Block scheduling (n=66)	Length of class period*	3.00	3.03	2.77
	Number of times class meets per week ^a	5.00	4.34	3.42
	Length of current unit [△]	4.00	2.66	2.64
	n	7	77	61
No block scheduling (n=145)	Length of class period*	2.71	2.70	2.59
	Number of times class meets per week [□]	4.57	4.94	5.00
	Length of current unit [△]	2.67	2.37	2.52

^{*} Scale: 1 = Under 40 min., 2 = 40-60 min., 3 = 61-90 min., 4 = 91-120 min., 5 = More than 120 min.

 $^{^{\}square}$ Scale: 1 = One time, 2 = Two times, 3 = Three times, 4 = Four times, 5 = Five times

 $[\]triangle$ Scale: 1 = One week, 2 = Two-Three weeks, 3 = One month, 4 = More than one month.

Part 3, Section 2 - Distribution of Class Time

Items a through e. Figure 48 reports the mean percentage of ass time for all parts of Section 2. This question asked teachers to report the percentage of the class time spent in various activities: management or administrative routines, interruptions, and other non-instructional activities; teacher-led whole class lecture or discussion; individual student work—reading textbooks, completing worksheets, etc.; small group work; and other activities. All responses where the total amount of class time did not equal 100 percent were excluded from the analysis.

Results were analyzed using one-way MANOVA, between groups design. For these questions no significant effects were found for the categorical variables.

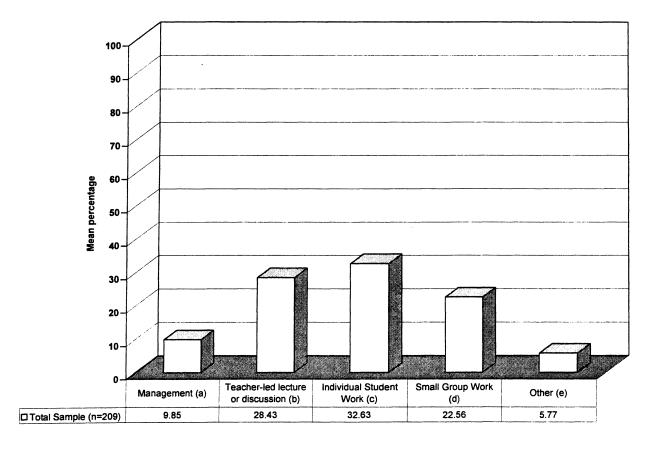


Figure 48. Mean percentage of class time for Part 3, Question 2.

"Other" category. While teachers reported an average of 5.77% of class time spent in "other" activities, the responses contained so much variance that reporting percentages across grade, region, and use of assessment is not meaningful. Regardless of categorical variable, however, the responses to this question fall into sixteen categories, shown in Table 32.

Table 32. Responses to Part 3, Section 2, Item e.

Category	Number of responses
Work with peers: editing, reviewing, tutoring, reading	9
Whole class activity: boardwork, homework review, video, etc.	12
Library/research	9
Writing: essays, process writing, etc.	6
Assessment	6
Presentations by students	6
Individual projects	5
Journal	4
Individual student work	4
Group work	3
Individual student instruction	3
Art	1
Creative drama	1
Discipline	1
Teacher conferencing	1
Other (unspecified)	2

Part 3, Section 3 – Open Questions

Qualitative items on the insert sheet were coded using QSR Nud*ist Qualitative Software. Because the format of the survey allowed multiple responses to each question, only frequencies are reported.

<u>Professional Development.</u> This section was divided into four categories of response: Content of Professional Development, Desired Structure of Professional Development, Comments about Current Professional Development, and General Responses. Content of Professional Development. Most responses in this category indicated a desire for workshops on bringing performance assessment into the classroom (47). Many of these teachers (14) expressed a desire to know precisely what skills are necessary for success on the MAP so that these skills can be taught in the classroom. Five (5) teachers requested workshops on classroom-based performance assessment activities that were not based on workbook-style exercises. Workshops on writing and grading their own constructed response items and on using released samples in class were mentioned by four (4) teachers each. Three (3) responses were received on each of the following categories: changing classroom practices, using portfolios, and using results to benefit the students in some way. Using graphic organizers, conducting remedial work with underachievers, teaching children to write, and group work followed with two (2) responses each. The categories that rounded out this area with single responses were the new basal system's effect on students, holding students responsible for their MAP scores, teaching children to think, and introducing authentic spelling into the classroom. One teacher wrote:

It would be helpful to receive information about how I could personally change my current classroom practices to better prepare my students for the new assessment.

Most teachers seem willing to consider changes in the classroom environment to facilitate the type of discovery learning promoted by performance assessment activities, but are unsure exactly what changes they need to implement and how they can bring them about.

The second most frequent response was in the area of scoring. Twenty-two (22) teachers expressed a desire for professional development in scoring the results. The responses of these teachers seem to come from two different motivations. One motivation appears to be the disbelief that performance assessments can be scored fairly over large numbers of exams. The other motivation seems to be the desire to understand precisely how the assessments are scored so teachers can teach their classes according to this type of scoring, perhaps using performance assessment themselves, or for the purpose of explaining this aspect of the program to parents or students. Closely correlated with this category is one on interpreting the results. Twelve (12) teachers expressed a desire to learn how to interpret results, some for the purpose of diagnosing the areas in their teaching program that need more attention. One (1) teacher each asked how exactly to use the scores in class, how to assess learning-disabled students, and how to explain the results to parents. Three (3) teachers mentioned that they would like professional development in scoring, without further specification.

Next, fifteen (15) teachers requested workshops on the purpose of the assessment program. Seven (7) teachers wanted to have a workshop on the empirical validity of the MAP and four (4) asked for a workshop that explained the theory behind the MAP. Three (3) teachers mentioned the purpose of the assessment, without further elaboration, and one (1) teacher was interested in using the MAP as a diagnostic tool. The answers were brief and straightforward:

I would like someone to explain the theory and the practicality of this assessment.

Moreover, ten (10) teachers requested workshops in aligning current curriculum with the assessment. This was a broad-based concern that also occurred in responses indicating teacher dislikes about the assessment. It would appear that many teachers are concerned with the way curricula and assessment are not aligned, and that some of these teachers would like to see how such alignment can be accomplished. One teacher wrote:

Teachers should be provided with textbooks, materials, and tests with inservice training designed specifically for Missouri's required objectives and MAP testing.

Eight (8) teachers expressed a desire to have more released examples, and four (4) wanted to meet with experts, either teachers who have had successful experiences with the MAP or members of the state MAP committee.

Responses that fell into none of the above categories or could not be understood were grouped together under "other." These included expressed desires for ITI, an explanation of what the state means by "communication arts," how to learn through constructed response, developing better test materials, multiple intelligences, and brain-based research.

<u>Desired Structure of Professional Development.</u> This category was divided into three parts. In the first part, all unspecific responses of the type "workshop" or "inservice" were included. Eight (8) teachers responded in this manner. Three (3) teachers requested that any professional development be grade specific. The desire for separate workshops at the 3rd-, 7th-, and 11th-grade levels represents another teacher concern that shows up in responses to other open-ended questions: that the different grades need to be considered separately. Finally, a single (1) teacher requested that the workshops be held at the building or department level rather than at the district level.

<u>Comments about Current Professional Development.</u> Some teachers wanted to express themselves about current professional development. Two (2) teachers reported that the "same tired themes" are discussed now, and concerns about anchor paper's grading subjectivity, teachers leaving professional development on the MAP frustrated, the workshops being good, and getting detailed answers each received one (1) response.

General Responses. Fifty-six (56) teachers left this question blank, while fourteen (14) replied that they needed no professional development. Twenty-one (21) were unsure of the type of professional development they needed, and six (6) said that they would be happy with any kind. Seven (7) teachers indicated that they already have enough professional development, and the categories of having time, having an education degree, and getting information were mentioned by one (1) teacher each.

What Teachers Like about the MAP.

<u>Emphasis on Process.</u> One hundred and thirteen (113) teachers indicated that they liked the emphasis on process instead of product in the MAP. Most of these teachers (41) stated that they liked the emphasis on writing in the assessment. An elementary school teacher wrote:

I've always felt that writing—even essays—were always very important. Students must be able to put their thoughts in writing, but many can't do it very well because of many of our environmental influences—Sitcoms, Nintendos—fast immediate response things. Kids no longer have to nor want to think—all they want is the answer.

Two high-school teachers wrote:

I like the emphasis on the importance of writing in all areas. It isn't just something for "English." In addition it does emphasize that students must have written skills.

I like how students must actually write to demonstrate how well they can write. I like that the test measures all aspects of the writing process and that students are given time to prewrite, draft & revise.

Forty (40) responses dealt with performance tasks. Eight (8) teachers said simply that they liked the fact that the assessment included performance tasks. Twenty-four (24) teachers reported liking that the MAP requires demonstration of knowledge. They liked the fact that students must master the body of knowledge in order to apply it to different situations. Eight (8) more teachers reported that they liked the constructed responses. Two elementary school teachers wrote:

Performance-based activities do allow students, teachers, and parents to see a truer picture of each child's ability to apply the skills they've learned in a more authentic way.

I like how the students had to write explanations. They actually thought about their answers. I liked how hard my students worked. I don't know how well they did, but I do know they gave it their best shot!

Sixteen (16) teachers commented on the amount of thoughtfulness that the assessment requires of the students. One elementary school teacher wrote:

It causes the teachers to teach students to think on a higher level. The students have learned how to reason through their questions.

And a middle school teacher commented:

Students must be able to think through the question and organize their thoughts, rather than simply remembering facts.

There were twelve (12) responses that expressed satisfaction with the authenticity of the assessment, which did not elaborate beyond this expression. Three (3) teachers liked the fact that the exam encourages creativity and one (1) responded that the assessment requires students to construct meaning.

Format. Forty-two (42) teachers commented positively on the format of the assessment, two (2) of whom did not further elaborate. Based on these responses, several sub-categories were extracted.

Twenty (20) teachers responded that they like the fact that the assessment is challenging. One (1) teacher felt that the constructed response section is challenging and one (1) teacher commented that by being challenging, the exam engages both teachers and students. The other eighteen (18) teachers like the fact that the MAP discourages guessing by the types of questions it has. There seems to be a general feeling among these teachers that multiple choice tests are not the optimal testing method.

Correlated with the desire to discourage guessing on the assessment is teachers' expression of their contentment with the variety of question types that appear on the assessment. Eleven (11) teachers commented on this topic, some of whom explained that the variety keeps the students interested while also providing a more accurate picture of the student's ability. Students who might not be good at taking multiple choice tests have other kinds of questions on which they may excel.

The sub-category of assessment specifics was divided into two sub-categories: administration and instrument. Three (3) teachers responded in the first category, one (1) praising the integrated answer sheet in Section 3, one expressing satisfaction that the student could write in the booklets, and one applauding the fact that dictionaries are allowed in the assessment. In the category of instrument, six (6) teachers responded, two (2) of whom commented that they liked that the questions were sequential and focused, two (2) of whom said that the assessment instrument itself looked good, one (1) who liked the writing sample section, and one (1) who liked Sections 1, 2, and 3 of the 3rd-grade assessment.

Scoring. Fewer people gave responses that fell into the third category, scoring. Six (6) teachers expressed a belief that the assessment provides a more accurate representation of student ability, and they like this aspect very much. Four (4) teachers said that the awarding of partial credit was good, and the same number expressed satisfaction with there being multiple correct responses on the assessment. Two (2) teachers liked that writing is assessed on the exam, perhaps in comparison with the MMAT, and the same number responded positively to students' work being graded on content and not on mechanics. On the other hand, one (1) teacher said just the opposite.

<u>General Responses.</u> Forty-one (41) teachers did not respond to this question. Nineteen (19) reported that they liked nothing about the MAP, eight (8) were unsure, and one (1) was pleased that the MAP had replaced the MMAT.

<u>Administration.</u> This category encompasses responses that have to do with the administration of the assessment and had fifteen (15) items. Four categories had two (2) responses each: that the MAP allows for innovative teaching methods, that students are accountable, that the MAP provides for teacher self-evaluation, and that the MAP is better tied to the curriculum. Single responses (1) were had in each of seven areas: the teacher can assist the students by pronouncing words, items are released, the MAP is an appropriate assessment for third grade students, only two subjects are assessed at the third-grade level, that the MAP gives a clear picture of classroom weaknesses, that the MAP is a fair assessment, and that the MAP fosters integration in the curriculum.

What Teachers Dislike about the MAP.

<u>Format—Writing.</u> Several categories were discernable among the responses of those teachers who expressed dissatisfaction with the MAP in the area of writing. Of the thirty-seven (37) responses, eighteen (18) of them dealt with the writing process being too complex for one sitting. This concern was raised at every grade level. An elementary school teacher passionately wrote:

The writing part (Session 2) is not reality. 3rd grade students can not prewrite, rough draft, & final copy in 60 minutes! HELLO!!! A story is a project that takes a week to 2 weeks to begin, develop, & finalize. FIX THIS! Even if we give them more time, can we give them a week!

A middle-school teacher wrote:

On the comm. Arts test, students were required to prewrite, write, revise & edit, and rewrite in one sitting. This is an unreasonable expectation. VERY little revising took place. Also, students had great difficulty writing their second draft, because it required flipping back & forth between the 2 drafts constantly. I would suggest having students prewrite & create a first draft one day, then revise & edit and rewrite another day. Also, I would allow the first draft to be removed from the book to make writing the second draft easier.

A high school teacher heatedly wrote:

Asking an eleventh grade student to complete a composition through full process (e.g. prewriting, drafting, editing, and revision/rewriting) is TOTALLY unreasonable. I know of no business or occupation in which any worker would ever need to do such a thing in a one-hour time frame. Many of my college prep students found the frustration of choosing a topic AND taking

it through full process in one hour completely overwhelming. I feel sure the creators of the assessment could not do it.

Ten (10) teachers do not like the fact that students who do not read and write well tend not to succeed on the assessment, four (4) reported simply that there is too much writing on the assessment. One (1) teacher mentioned that the Terra Nova teacher's guide indicates that spelling is not important, and one (1) also remarked that there is not enough writing on the exam. This category was rounded out by a single response (1) indicating that there are students who give up because of the amount of writing required.

<u>Format—Clarity.</u> Sixteen (16) teachers responded in this category and their responses fell into two areas: either they felt the directions to the students were unclear, or they thought the questions themselves were unclear. There were eight (8) responses in each of these categories. Some indicated that there is a discrepancy between what teachers are told in the instructions and what they are allowed to say to the students. Some indicated that the steps are complicated and difficult to follow.

<u>Format—Time Issues.</u> Thirty (30) teachers had problems with time issues associated with the MAP. Sixteen (16) reported that the assessment is too long. Others were more specific; two (2) each reported that sections 1 and 3 are too long, one (1) suggested that section 3 is too long, and one (1) said that the constructed response section was too long. Three (3) teachers felt that the reading selections themselves were too long, and two (2) indicated that the organization of the exam with respect to class periods is awkward. Moreover, two (2) teachers indicated that the untimed sections were "silly."

<u>Format—Other.</u> Some of the responses made about the format of the assessment could not be categorized. Of these items, the most prominent expressed dissatisfaction with the page organization of the exam. Especially criticized was the "flipping back and forth" that was required in the writing section. While this was especially prominent in elementary schools, eight (8) teachers from all grade levels implementing the assessment mentioned it. Four (4) teachers expressed concern over problems with the carbonless paper. Apparently, teachers were able to remove carbonless copies of the students' final essays for their own purposes, but at least in one case, the carbonless paper did not work, and the teacher was left with nothing. In another, the students were so concerned that their writing was showing up on the carbonless paper that they had to work more slowly.

In the following areas, two (2) teachers each expressed dislike: the questions change each year, performance cannot be scored on a written assessment, and the use of jargon on the assessment (e.g., third graders did not know what "prompt" meant).

<u>Content.</u> There were few comments in the area of content, although some of these remarks are tied to those in the later section on administration. One (1) high school teacher mentioned that the literary quality of the MAP is poor, one (1) remarked that the readings do not interest the students, and an elementary school teacher (1) expressed the belief that the MAP is an unfair assessment of knowledge. Three (3) teachers expressed concern that the MAP is not

aligned with the curriculum. Another specifically pointed out the difficulty in writing curriculum when ignorant of the skills that are needed, and yet another suggested that Part 3 is particularly a problem in this area.

Results and Scoring. Thirty-four (34) responses were received in this category. The most common complaint, with twelve (12) responses, was that the scoring is subjective and not consistent across the state. Five (5) were exasperated at the length of time it takes to get the results, saying that they would like to get the results in time to help the students who took the assessment while the students are still in their classroom. The same number of teachers (5) indicated that they do not like how the scores are returned to them; they indicated a need for a breakdown of the class instead of aggregated scores. Four (4) teachers expressed the opinion that the expectations of the assessment are unclear, and the same number (4) pointed out that the scores from one class are being compared with scores from a completely different class when the state looks for "improvement." Two (2) teachers expressed the need for specific scoring guidelines. The following categories each received one (1) response: parents do not understand the scoring, and grade levels other than 3, 7, and 11 are not taken into account.

<u>Administration</u>. The category of administration covers aspects not dealing with the assessment instrument itself, but having to do with comments about its administration. Five broad categories in this section were distinguished: 3rd-grade concerns, 7th-grade concerns, 11th-grade concerns, special needs students, and the pressure teachers and districts feel to improve scores. The other responses received that did not fall into one of these categories will be reported after the others.

Third-Grade Concerns. Forty-six (46) responses were received in this category, many of which were passionate. Most of the responses (33) dealt with the belief that the assessment is too difficult for third graders. The following are two examples:

I'm concerned that the level of expectations and quantity of objectives in science and communication arts is unrealistic. Some required skills are not developmentally appropriate for third grade children. The scoring guides (rubrics) also enable an element of subjectivity to enter with an individual scoring a test. The state might reconsider assigning the science and communication arts testing to the fifth grade where it may be more age appropriate. The state might also consider decreasing the quantity of objectives required in these areas so that fewer concepts could be taught in depth. This would provide a stronger foundation upon which to build. It would be difficult to eliminate all subjectivity with performance-based testing. Although I understand the concept behind this form of testing, I don't know that I have a solution to preventing the problem without returning to a totally multiple choice test.

I agree that the children should be able to communicate effectively in written form, but these tests (comm. arts & science) are too much for 3rd graders! I

had one student who accidentally made holes in his test with his tears. It is too much writing! None of my students were ever this upset over the MMAT.

Eight (8) teachers indicated that the topics of the assessment are not of interest to third graders, and suggested that more appropriate topics be chosen for them. Two (2) teachers reported that the assessment is an unfair evaluation of third graders' knowledge, and single responses were received on each of the following concerns: students this age have difficulty following directions, there is too much writing for third graders, and two tests are too much for third graders.

Seventh-Grade Concerns. Only one (1) response was received in this category; the teacher indicated that the assessment is too difficult for 7th-grade students.

Eleventh-Grade Concerns. Only two (2) responses were received in this category; one teacher indicated that the prompt for Session 2 was poor, and the other disliked the test being given to all 11th-grade students, thinking that only those enrolled in communication arts should be targeted.

Special Needs Students. Only three (3) responses were received in this category. One teacher was concerned that all students' scores, including scores of non-English speaking and learning disabled students, were being factored into the school score. Two (2) teachers suggested that the needs of special needs students are not being addressed in the administration of the assessment.

Pressure on Teachers and Districts. Ten (10) teachers indicated that they feel too much pressure as a result of the assessment. Three (3) said that it is unfair that blame for low scores falls on only one teacher. Most teachers were concerned that funding for schools or for merit pay increases would be tied to assessment scores when the students have no stake in scoring highly.

Other. One area in this category stood out from the others. Sixteen (16) teachers indicated that the testing time detracts from instruction. Although this problem was mentioned at all grade levels, one high-school teacher wrote the most complete explanation:

I do not like taking instructional time to administer standardized tests - It ultimately detracts/ subtracts form student learning & the real purposes of education - I have no idea how to change that, but I'm concerned that testing time is increasing, giving less time for our curriculum.

Eight (8) teachers complained that the students are not held accountable for their scores, while seven (7) suggested that the assessment is difficult to prepare for. Single responses were received in the following categories: unclear how it can be used, MAP's content validity is unclear, administrators think that the MAP is a "passing fad," cost, loss of local control/

Two (2) responses were received in each of two further categories: students are not required to take the sections sequentially, and all students are expected to perform at the same level. With respect to the first of these, knowing that each section builds on the other, teachers are concerned

that students who miss a day and then take another section are working at a severe disadvantage and should be required to take the section they missed before they continue. The second gives voice to a concern that having proficiency levels is inherently unfair because it expects all students to work at the same level.

General Responses. In the category of general responses, thirty-six (36) teachers did not answer this question, and a further fifteen (15) were unsure of what they did not like. Two (2) teachers could find nothing to comment on, and one teacher was concerned that he/she did not know all the answers on the assessment.

<u>Recommendations.</u> Apart from the recommendations couched in teacher dislikes, each of the following recommendations was made by one teacher:

- 1) Assessment should be required for a grade or graduation.
- 2) Use released items as class assignments.
- 3) Give students a five-day period to write essays.
- 4) Give an oral assessment with a local MAP team.
- 5) Allow teachers to rephrase questions for students.
- 6) Reorder sections so the shorter ones come first.
- 7) Give the 3rd-grade tests in the 4th-grade.
- 8) Ensure honesty from teachers in administration of the assessment.
- 9) Combine sections on spelling and mechanics.
- 10) Give students more time on the performance sections.
- 11) Make the assessment grade appropriate.
- 12) Include more grammar questions.
- 13) State should have a computer scored test.
- 14) The assessment for every core area should be structured alike.
- 15) Include more multiple-choice questions.

Appendices

Missouri Teacher Survey of Classroom Practices

Communication Arts

Instructions for answer sheet - Please use a #2 pencil

The "NAME" box on the answer sheet has been pre-coded with your district and school code numbers.



- Please supply your birth date in the "SPECIAL CODES" area of the answer sheet in the form MMDDYY. For instance, if your birthday is on June 1, 1960, you would enter "060160" in the SPECIAL CODES box. Please note that this information is ONLY used for making sure you get a follow-up survey next year. It is NOT correlated with any of the other information you supply.

Please mark the grade (3, 7, or 11) of communication arts you teach in the "GRADE OR EDUCATION" box on the answer sheet.

CRADE OR EDUCATION				
0	3	9	€3	
(i)	٠	50	Ō	
0	Ō	Ō	Ō	
0	<u> </u>	9	Ō	



For all questions about classroom practices, please refer only to activities related to communication arts instruction. If you teach more than one communication arts class, please select your class with the most varied levels of student ability, then answer questions from the perspective of the selected class.

Part 1

Please respond to each of the following:

Are you on block scheduling for this course?

2. How many times per week does the class for which you are answering this survey meet?

1 = One time 2 = Two times3 =Three times 4 = Four times

How long is each of these class periods? 3.

1 = Under 40 minutes 2 = 40-60 min.3 = 61-90 min.4 = 91-120 min.5 = Greater than 120 min.

4. How often do you usually assign homework?

> 1 = Never2 = Less than 1/2 of class periods3 = 1/2 of class periods 4 = More than 1/2 of class periods5 = Every day

5. How many minutes do you expect your average student to spend on the homework you assign?

2 = Less than 15 minutes 3 = 15-30 minutes4 = 31-60 minutes1 = I don't assign any 5 = More than 60 minutes

Please indicate which of the following types of work are expected of students outside of class.

$$1 = N_0$$
 $2 = Yes$

- Read textbook. 6.
- Complete an independent project. 7.
- 8. Complete worksheets.
- Keep a journal.
- Complete a group project. 10.

How often does the average student do these things in class?

1 = Never 2 = Less than 1/2 of class period 3 = 1/2 of class period4 = Greater than 1/2 of class5 = Almost all

- 11. Listen to the teacher explain something.
- 12. Read from a textbook.
- Maintain a portfolio of his/her own work. 13.
- 14. Work in pairs or small groups.
- 15. Use the computer.
- Answer questions from a textbook or worksheet. 16.
- 17. Take a quiz or test.
- Take part in whole class discussion. 18.
- Ask questions to improve understanding. 19.
- Make predictions, guesses, or hypotheses. 20.
- Make maps, drawings, or models to show ideas. 21.
- Score or grade his/her own work using a scoring guide or rubric. 22.
- Apply concepts discussed in class to everyday life. 23.
- Read about class content from sources other than textbook. 24. Write about class content. 25.
- Keep a journal. 26.
- 27. Peer review.

Indicate the relative importance you give to each of the following in determining grades for students.

1 = Not important 2 = Somewhat not important

Objective tests (e.g. multiple choice, true/false).

29. Essay tests.

28.

- 30. Performance tasks or events.
- 31. Observation of student behavior.
- 32. Individual projects.
- 33. Group projects.
- 34. Homework assignments.
- 35. Portfolios.
- 36. Completion of written worksheets.
- 37. Individual seatwork.
- 38. Peer review.

Indicate how well prepared you are to perform the following activities:

1 = Not well prepared 2 = Somewhat prepared 3 = Prepared 4 = Well prepared 5 = Very well prepared

3 = Neutral

4 = Somewhat important

5 = Important

- 39. Use cooperative learning groups.
- 40. Use computers as an integral part of instruction.
- 41. Integrate this subject with other subject areas.
- 42. Use a variety of assessment strategies.
- 43. Help students document and evaluate their work through portfolios.
- 44. Teach groups that vary in ability.
- 45. Teach students from a variety of cultural backgrounds.
- 46. Teach students who have limited English proficiency.
- 47. Teach students who have learning disabilities.
- 48. Encourage participation of females.
- 49. Involve parents in the education of their children.

Indicate the degree to which each of the following influences the content you teach in this class.

1 = No influence 2 = Little influence 3 = Moderate influence 4 = Strong influence 5 = Very strong influence

- 50. Missouri's education curriculum framework or guidelines.
- 51. Your district's curriculum framework or guidelines.
- 52. Textbook.
- 53. Missouri's State Assessment Program.
- 54. Education standards or curriculum guidelines from national organizations.
- 55. Your understanding of what motivates your students.
- 56. Available equipment and supplies.
- 57. Student aptitude.
- 58. Practices of other teachers.
- 59. Parents.

Indicate the availability and approximate number of times per semester each of the following occurs with this class:

1 = Not available 2 = Available, but not used 3 = Used weekly 4 = Used bimonthly 5 = Used monthly

- 60. An overhead projector is used in instruction.
- 61. A videotape player is used in instruction.
- 62. A computer is used by you in instruction.
- 63. A computer is used by the students.

Please rate each statement using the following scale:

1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree

- 64. Student work areas should be flexible to accommodate a variety of learning activities, whether it be working individually or in small groups.
- 65. Portfolio assessment is more useful than traditional tests.
- 66. Instruction should be composed of projects and centers.
- 67. Subject matter should be integrated into all areas of the curriculum.
- 68. Novel solutions to problems should be encouraged.
- 69. Most of teacher preparation time should be used to prepare the classroom for hands-on activities.
- 70. A test is the most appropriate way to gauge a student's achievement.
- 71. The teacher's part in the attainment of subject matter is to diagnose and correct errors.
- 72. Assessment should be integrated into the learning and instructional process.
- 73. The teacher should primarily lead whole group instruction.
- 74. Teachers facilitate students finding their own meaning in experiences and interpretations of their environment.
- 75. It is important to have numerical scores so that a student's progress can be compared to that of other students.
- 76. Teachers should impart knowledge to students.
- 77. Students should be left to choose or form their own learning goals and objectives.
- 78. A quiet classroom is more productive than a busy and noisy room.
- 79. Teachers construct the correct understanding for students.
- 80. Learning should consist primarily of hands on activities.
- 81. Students need to learn basic skills before they can learn higher order thinking skills.
- 82. It is best when only one activity is taking place at one time in the classroom.
- 83. One of the main purposes of assessment is to gage whether or not a student has mastered the material to know whether a student can move on to the next level of instruction.
- 84. Teachers and curriculum developers should decide what children learn and how they learn it.
- 85. Teachers should imbed subject matter in authentic experiences.
- 86. The best way for students to show they have mastered the subject matter is to demonstrate that knowledge.
- 87. Instruction should be divided into separate subject areas.
- 88. Instruction and assessment should be separate otherwise teaching to the test will occur.

Please rate the State Assessment Program using the following scale:

1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree

- 89. My overall impression of the new state assessment program is favorable.
- 90. The state assessment program is effective.
- 91. The new assessment results will be useful for instructional planning.
- 92. The new assessment results will be useful for addressing student needs.
- 93. The new assessment results will be useful for parent conferencing.

Part 2

Please respond to the following:

- 94. Please indicate your sex.
 - 1 = Female 2 = Male
- 95. Please indicate your ethnicity/race.
 - 1 = Caucasian American 2 = African American 3 = Hispanic 4 = Native American/Alaskan 5 = Asian/Pacific Islander
- 96. How many years have you taught prior to this year?
- 1 = Less than one year 2 = 1-2 years 3 = 3-5 years 4 = 6-10 years 5 = 10+ years
- 97. What is the highest degree that you hold?
- 1 = BA or BS 2 = Post-bac certification 3 = MA, MS, and/or EdS 4 = Ph.D. or Ed.D. 5 = Other
- 98. What was your major field of study for your Bachelor's degree?
 - 1 = Elementary Education 2 = Middle School Education 3 = Communication Arts Education 4 = A field of communication arts (including English, Journalism) 5 = Other disciplines (includes other fields: Science, History, Math)
- 99. What is the total amount of time you spent on professional development (e.g., national or state communication arts teacher association meetings) or in-service education in communication arts or teaching of communication arts in the last twelve months? (Do not include formal courses for which you received college credit.)
 - 1 = None 2 = Less than 6 hours <math>3 = 6-15 hours 4 = 16-35 hours 5 = More than 35 hours

	he following ite	ems, piease	answer only for the	ne previous 12-	month period.	
	$1 = N_0$	2 =	Yes			
100. 101. 102.	Have you serv	ed on a scho	ool or district commod district or state formal performan	assessment deve	elopment or select	
Pleas	e respond to ea	ch of the fo	llowing statemen	ts:		
	1 = Strongly	disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly agree
115.	It is important (e.g. reading, Activity-drive I enjoy teachir I feel supporte I receive supp Communicatio Activity-based I am required Most commun I consider mys I feel that I have	for students writing, public necessary, public n	lic speaking). cation arts classes a cation arts. cues to try out new school administrat ers in this school r ers in this school r ation arts experience les at this school the	ls (e.g. letter recure more effective ideas in teaching ideas in teaching egularly share ideagularly observed are conflict with a conflict wit	te than non-activity of communication a deas. The each other teaching the time and expensively in communication and expensively in communication and expensively in communications.	grammar) before learning advanced concepts and principles y-driven classes. arts. rts. ng classes as part of sharing and improving instruction. nse. nal judgment about teaching and learning communication art nication arts curriculum development.
If you	ı participated i	n the Spring	g 1998 assessmen	t, please rate th	e following aspec	ts of the assessment program using this scale.
	1 = Poor	2 = Fair	3 = Average	4 = Good	5 = Excellent	
118. 119. 120.	Instructions fo Test materials. Amount of tim Timeliness of a Format.	ne needed for	r test preparation a	nd administratio	on.	

Thank you for your participation.

Please place the following items in your survey packet envelope:

Completed consent form

Completed Parts 1 and 2 on scantron answer sheet

Completed Part 3 on insert sheet

and return the sealed packet to your principal, who will relay it to us.

Department of Educational and Counseling Psychology University of Missouri - Columbia 16 Hill Hall Columbia, MO 65211



PART 3

Section 1 - Units

Please circle the skill emphases of your current unit: (You	may circle more than one response.)
---	-------------------------------------

1. Reading skills

- Media awareness (e.g. TV, radio, film, etc.)
- 2. Oral communication (e.g. public speaking)
- Integrated curriculum (across discipline)
- 3. Written communication (e.g. spelling, grammar)
- 7. Other (please specify):

4. Research and analytical skills

Please circle the length of your current unit:

1. One week

- 3. One month

2. Two – three weeks

4. More than one month

Section 2 - Distribution of class time in current unit:

Please enter the percentage of time for each item in the box provided so that items a-e total 100%.

Activity	Percentage of class time
a. Management or administrative routine, interruptions, and other non-instructional activities.	
b. Teacher-led whole class discussion.	
c. Individual student work: reading textbooks, completing worksheets, etc.	
d. Small group work.	
e. Other (please describe):	
Total	100%

Section 3 – Open questions

Please use space provided to answer the following questions.

- 1. What types of professional development would you need to better understand and use the results of the new assessment?
- 2. Which aspects do you like most about the new assessment program?
- 3. Which aspects do you like least about the new assessment program, and how would you change them?

APPENDIX B: SUMMARY DATA TABLES

PART 1:

SCHEDULING

Table 1. Total Sample: Percents for Responses, Questions 1 through 5

Question	1		2		<u>n</u>	
1	68.7		31.3		214	
	1	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>n</u>
2	0.0	4.2	10.4	0.0	85.4	212
3	6.5	40.7	34.7	8.3	9.7	216
4	3.2	37.0	20.1	19.2	20.5	219
5	2.7	16.4	67.1	13.2	0.5	219

SCHEDULING BROKEN DOWN BY GRADE

Table 2. Percents for Responses, Questions 1 through 5

	<u>GR</u> /	ADE 3	<u>3</u>				GRADE 7							GRADE 11					
Question	84.68		2		<u>n</u>		1	2	:	n			1		2		<u>n</u>		
1	84.68	}	15.32		111		51.02	2 4	8.98	4	9		50.94		49.06		53		
	1	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>n</u>	1	2	<u>3</u>	<u>4</u>	<u>5</u>	<u>n</u>	1	2	<u>3</u>	<u>4</u>	<u>5</u>	<u>n</u>	
2	0.00	0.88	0.00	0.00	99.12	113	0.00	2.08	12.50	0.00	85.42	48	0.00	14.00	32.00	0.00	54.00	50	
3	11.50	28.32	27.43	14.16	18.58	113	2.04	59.18	38.78	0.00	0.00	49	0.00	49.06	47.17	3.77	0.00	53	
4	2.59	50.86	15.52	7.76	23.28	116	4.08	30.61	22.45	26.53	16.33	49	3.77	13.21	28.30	35.85	18.87	53	
5	1.72	26.72	65.52	6.03	0.00	116	4.08	8.16	75.51	10.20	2.04	49	3.77	1.89	62.26	32.08	0.00	53	

SCHEDULING BROKEN DOWN BY REGION

Table 3. Percents for Responses, Questions 1 through 5

	<u>URI</u>	<u>BAN</u>					SUBURBAN							RURAL					
Question	1 2				<u>n</u>		1		2		<u>n</u>		1		2		<u>n</u>		
1	87.50)	12.50	l	8		66.67		33.33		117		70.11		29.89		87		
	<u>1</u>	2	<u>3</u>	<u>4</u>	<u>5</u>	<u>n</u>	1	2	<u>3</u>	<u>4</u>	<u>5</u>	<u>n</u>	1	2	<u>3</u>	<u>4</u>	<u>5</u>	<u>n</u>	
2	0.00	11.11	0.00	0.00	88.89	9	0.00	3.45	7.76	0.00	88.79	116	0.00	4.71	15.29	0.00	8 0.00	85	
3	0.00	55.56	33.33	0.00	11.11	9	8.55	34.19	37.61	6.84	12.82	117	4.55	48.86	30.68	11.36	4.55	88	
4	0.00	10.00	0.00	10.00	80.00	10	2.52	31.93	18.49	21.85	25.21	119	4.55	46.59	23.86	17.05	7.95	88	
5	0.00	0.00	80.00	20.00	0.00	10	2.52	14.29	68.91	13.45	0.84	119	3.41	20.45	63.64	12.50	0.00	88	

OUT-OF-CLASS REQUIREMENTS

Table 4. Total Sample: Percents for Responses, Questions 6 through 10

Question	1	2	<u>n</u>	
6	40.2	59.8	219	
7	17.8	82.2	219	
8	25.6	74.4	219	
9	75.3	24.7	219	
10	68.8	31.2	218	

OUT-OF-CLASS REQUIREMENTS BROKEN DOWN BY GRADE

Table 5. Percents for Responses, Questions 6 through 10

	GRADE :	<u>3</u>		GRADE 1	7		GRADE 11				
Question	1 2		<u>n</u>	1 2		<u>n</u>	1	2	<u>n</u>		
6	46.55	53.45	116	42.86	57.14	49	24.53	75.47	53		
7	27.59	72.41	49	6.12	93.88	49	7.55	92.45	53		
8	24.14	75.86	116	24.49	75.51	49	30.19	69.81	53		
9	81.03	18.97	116	71.43	28.57	49	66.04	33.96	53		
10	82.76	17.24	116	53.06	46.94	49	51.92	48.08	52		

OUT-OF-CLASS REQUIREMENTS BROKEN DOWN BY REGION

Table 6. Percents for Responses, Questions 6 through 10

	<u>URBAN</u>			SUBURE	BAN		RURAL					
Question	1	2	n	1	2	<u>n</u>	1	2	<u>n</u>			
6	50.00	50.00	10	39.50	60.50	119	38.64	61.36	88			
7	10.00	90.00	10	18.49	81.51	119	17.05	82.95	88			
8	0.00	100.0	10	27.73	72.27	119	23.86	76.14	88			
9	40.00	60.00	10	78.15	21.85	119	76.14	23.86	88			
10	70.00	30.00	10	65.25	34.75	118	72.73	27.27	88			

IN-CLASS REQUIREMENTS

Table 7. Total Sample: Percents for Responses, Questions 11 through 27

	Percent	İ				
Question	1	2	<u>3</u>	<u>4</u>	<u>5</u>	<u>n</u>
11	0.5	52.1	25.1	9.1	13.2	219
12	5.5	65.3	19.2	4.6	5.5	219
13	33.2	47.5	4.6	4.1	10.6	217
14	0.9	50.2	32.9	11.4	4.6	219
15	18.3	69.3	5.5	1.8	5.0	218
16	6.8	61.6	22.4	6.4	2.7	219
17	3.2	75.7	11.0	4.6	5.5	218
18	0.5	40.2	30.6	18.7	10.0	219
19	0.5	51.1	24.2	14.6	9.6	219
20	1.8	54.8	24.2	14.6	4.6	219
21	5.9	65.3	20.1	6.8	1.8	219
22	31.5	54.3	7.3	5.0	1.8	219
23	2.7	43.8	25.1	20.1	8.2	219
24	5.9	49.8	23.7	13.7	6.8	219
25	8.2	47.9	27.9	11.9	4.1	219
26	30.1	47.5	9.6	3.7	9.1	219
27	15.1	58.0	16.9	5.9	4.1	219

IN-CLASS REQUIREMENTS BROKEN DOWN BY GRADE

Table 8. Percents for Responses, Questions 11 through 27

	<u>GR</u> /	ADE 3	3				GRADE 7						GRADE 11					
Question	1	2	<u>3</u>	4	<u>5</u>	<u>n</u>	1	2	3	4	<u>5</u>	n	1	2	3	4	5	<u>n</u>
11	0.86	52.59	20.69	10.34	15.52	116	0.00	57.14	28.57	6.12	8.16	49	0.00	45.28	32.08	9.43	13.21	53
12	5.17	65.52	18.10	4.31	6.90	116	6.12	71.43	20.41	0.00	2.04	49	5.66	58.49	20.75	9.43	5.66	53
13	41.23	45.61	4.39	3.51	5.26	114	24.49	55.10	2.04	2.04	16.33	49	24.53	43.40	7.55	7.55	16.98	53
14	1.72	45.69	33.62	14.66	4.31	116	0.00	55.10	36.73	4.08	4.08	49	0.00	54.72	28.30	11.32	5.66	53
15	13.04	78.26	4.35	1.74	2.61	115	28.57	53.06	10.20	0.00	8.16	49	20.75	64.15	3.77	3.77	7.55	53
16	2.59	62.93	21.55	8.62	4.31	116	10.20	61.22	24.49	2.04	2.04	49	13.21	58.49	22.64	5.66	0.00	53
17	2.59	82.76	6.03	1.72	6.90	116	0.00	75.00	12.50	8.33	4.17	48	7.55	60.38	20.75	7.55	3.77	53
18	0.00	39.66	33.62	15.52	11.21	116	2.04	51.02	26.53	14.29	6.12	49	0.00	30.19	28.30	30.19	11.32	53
19	0.00	53.45	19.83	14.66	12.07	116	0.00	59.18	32.65	4.08	4.08	49	1.89	37.74	26.42	24.53	9.43	53
20	0.00	55.17	21.55	18.10	5.17	116	0.00	63.27	28.57	2.04	6.12	49	7.55	45.28	26.42	18.87	1.89	53
21	2.59	64.66	20.69	9.48	2.59	116	4.08	69.39	20.41	4.08	2.04	49	15.09	62.26	18.87	3.77	0.00	53
22	38.79	49.14	4.31	6.03	1.72	116	18.37	61.22	10.20	6.12	4.08	49	26.42	60.38	11.32	1.89	0.00	53
23	2.59	44.83	26.72	17.24	8.62	116	0.00	59.18	20.41	14.29	6.12	49	5.66	26.42	26.42	32.08	9.43	53
24	6.90	51.72	25.00	8.62	7.76	116	4.08	59.18	20.41	12.24	4.08	49	5.66	35.85	24.53	26.42	7.55	53
25	9.48	54.31	24.14	8.62	3.45	116	4.08	51.02	28.57	14.29	2.04	49	9.43	30.19	35.85	16.98	7.55	53
26	25.00	52.59	7.76	4.31	10.34	116	36.73	40.82	12.24	6.12	4.08	49	35.85	41.51	11.32	0.00	11.32	53
27	21.55	57.76	13.79	4.31	2.59	116	6.12	57.14	22.45	6.12	8.16	49	9.43	58.49	18.87	9.43	3.77	53

IN-CLASS REQUIREMENTS BROKEN DOWN BY REGION

Table 9. Percents for Responses, Questions 11 through 27

	URE	BAN					SUBURBAN						RURAL					
Question	1	2	3	4	<u>5</u>	n	1	2	<u>3</u>	4	<u>5</u>	n	1	2	3	4	5	<u>n</u>
11	0.00	50.00	0.00	20.00	30.00	10	0.00	52.94	26.05	9.24	11.76	119	1.14	51.14	27.27	7.95	12.50	88
12	0.00	10.00	60.00	10.00	20.00	10	5.04	71.43	15.97	4.20	3.36	119	6.82	62.50	19.32	4.55	6.82	88
13	11.11	44.44	0.00	11.11	33.33	9	33.90	49.15	2.54	3.39	11.02	118	35.23	45.45	6.82	4.55	7.95	88
14	0.00	10.00	40.00	30.00	20.00	10	0.00	52.10	33.61	10.08	4.20	119	2.27	52.27	31.82	11.36	2.27	88
15	20.00	50.00	10.00	10.00	10.00	10	22.88	70.34	3.39	0.85	2.54	118	12.50	70.45	6.82	2.27	7.95	88
16	0.00	30.00	20.00	30.00	20.00	10	9.24	68.07	16.81	5.04	0.84	119	4.55	55.68	30.68	5.68	3.41	88
17	0.00	60.00	0.00	10.00	30.00	10	4.24	77.12	10.17	5.08	3.39	118	2.27	75.00	13.64	3.41	5.68	88
18	0.00	10.00	30.00	30.00	30.00	10	0.00	43.70	26.89	19.33	10.08	119	1.14	38.64	36.36	15.91	7.95	88
19	0.00	40.00	10.00	30.00	20.00	10	0.84	49.58	25.21	15.97	8.40	119	0.00	54.55	23.86	11.36	10.23	88
20	0.00	40.00	10.00	30.00	20.00	10	2.52	52.94	26.05	15.97	2.52	119	1.14	59.09	23.86	10.23	5.68	88
21	0.00	30.00	10.00	50.00	10.00	10	5.88	65.55	24.37	3.36	0.84	119	6.82	69.32	14.77	6.82	2.27	88
22	10.00	50.00	10.00	20.00	10.00	10	28.57	58.82	5.88	5.88	0.84	119	38.64	47.73	9.09	2.27	2.27	88
23	0.00	10.00	40.00	20.00	30.00	10	2.52	45.38	25.21	20.17	6.72	119	3.41	45.45	22.73	20.45	7.95	88
24	0.00	40.00	30.00	20.00	10.00	10	5.88	45.38	26.05	15.97	6.72	119	6.82	56.82	19.32	10.23	6.82	88
25	0.00	40.00	30.00	10.00	20.00	10	5.88	51.26	27.73	11.76	3.36	119	12.50	44.32	28.41	11.36	3.41	88
26	10.00	30.00	20.00	20.00	20.00	10	32.77	44.54	10.92	3.36	8.40	119	29.55	53.41	6.82	2.27	7.95	88
27	10.00	40.00	30.00	10.00	10.00	10	17.65	58.82	14.29	4.20	5.04	119	12.50	57.95	19.32	7.95	2.27	88

GRADING INSTRUMENTS

Table 10. Total Sample: Percents for Responses, Questions 28 through 38

	1	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>n</u>
Question				 		
28	10.2	13.9	7.9	44.9	23.1	216
29	6.0	8.3	7.4	41.2	37.0	216
30	0.9	3.7	10.2	37.5	47.7	216
31	9.3	13.9	14.8	31.0	31.0	216
32	0.0	6.0	12.5	45.4	36.1	216
33	4.6	9.7	20.8	47.2	17.6	216
34	2.8	19.8	19.4	37.3	20.7	217
35	15.3	18.1	27.8	25.9	13.0	216
36	7.4	11.1	16.1	44.7	20.7	217
37	5.6	11.6	18.1	45.4	19.4	216
38	18.4	17.1	23.0	31.8	9.7	217

GRADING INSTRUMENTS BROKEN DOWN BY GRADE

Table 11. Percents for Responses, Questions 28 through 38

	<u>GR</u> /	ADE 3	3				<u>GR</u> A	DE 3	7_				GRA	DE 1	1			
Question	1	2	3	4	<u>5</u>	n	1	2	3	4	<u>5</u>	n	1	2	3	4	<u>5</u>	n
28	7.96	11.50	5.31	45.13	30.09	113	8.16	22.45	10.20	42.86	16.33	49	16.98	11.32	11.32	47.17	13.21	53
29	7.08	13.27	12.39	39.82	27.43	113	4.08	2.04	4.08	53.06	36.73	49	5.66	3.77	0.00	33.96	56.60	53
30	0.88	6.19	15.93	38.05	38.94	113	0.00	0.00	0.00	32.65	67.35	49	1.89	1.89	7.55	39.62	49.06	53
31	7.08	12.39	13.27	28.32	38.94	113	12.24	4.08	14.29	42.86	26.53	49	11.32	24.53	18.87	26.42	18.87	53
32	0.00	8.85	19.47	45.13	26.55	113	0.00	0.00	0.00	40.82	59.18	49	0.00	5.66	9.43	49.06	35.85	53
33	7.02	11.40	27.19	42.98	11.40	114	2.08	6.25	10.42	43.75	37.50	48	1.89	9.43	16.98	58.49	13.21	53
34	1.75	24.56	22.81	38.60	12.28	114	4.08	20.41	12.24	30.61	32.65	49	3.77	9.43	18.87	39.62	28.30	53
35	13.27	23.89	32.74	24.78	5.31	113	22.45	4.08	26.53	22.45	24.49	49	13.21	16.98	18.87	32.08	18.87	53
36	2.63	8.77	15.79	46.49	26.32	114	10.20	14.29	16.33	40.82	18.37	49	15.09	13.21	16.98	43.40	11.32	53
37	2.65	10.62	13.27	47.79	25.66	113	4.08	12.24	22.45	44.90	16.33	49	13.21	13.21	24.53	39.62	9.43	53
38	27.19	18.42	22.81	27.19	4.39	114	8.16	8.16	24.49	40.82	18.37	49	9.43	20.75	22.64	33.96	13.21	53

GRADING INSTRUMENTS BROKEN DOWN BY REGION

Table 12. Percents for Responses, Questions 28 through 38

	<u>URE</u>	<u>BAN</u>					<u>SUB</u>	URB.	<u>AN</u>				RUR	AL				
Question	1	2	3	4	<u>5</u>	n	1	2	3	4	5	ū	1	2	<u>3</u>	4	<u>5</u>	n
28	20.00	0.00	20.00	40.00	20.00	10	11.02	15.25	7.63	44.07	22.03	118	8.05	13.79	5.75	47.13	25.29	87
29	10.00	0.00	10.00	20.00	60.00	10	6.78	6.78	10.17	42.37	33.90	118	4.60	11.49	3.45	41.38	39.08	87
30	0.00	0.00	0.00	20.00	80.00	10	1.69	3.39	10.17	39.83	44.92	118	0.00	4.60	11.49	36.78	47.13	87
31	0.00	0.00	10.00	20.00	70.00	10	6.78	12.71	16.95	29.66	33.90	118	13.79	17.24	12.64	34.48	21.84	87
32	0.00	10.00	20.00	40.00	30.00	10	0.00	3.39	10.17	48.31	38.14	118	0.00	9.20	13.79	42.53	34.48	87
33	0.00	10.00	20.00	40.00	30.00	10	2.56	9.40	25.64	44.44	17.95	117	7.95	9.09	14.77	52.27	15.91	88
34	0.00	20.00	20.00	10.00	50.00	10	1.69	22.88	15.25	38.14	22.03	118	4.55	14.77	25.00	39.77	15.91	88
35	10.00	0.00	10.00	40.00	40.00	10	12.71	20.34	29.66	24.58	12.71	118	19.54	17.24	27.59	26.44	9.20	87
36	0.00	10.00	10.00	30.00	50.00	10	9.32	11.02	16.10	45.76	17.80	118	5.68	10.23	17.05	45.45	21.59	88
37	10.00	0.00	10.00	30.00	50.00	10	8.47	10.17	19.49	45.76	16.10	118	1.15	13.79	17.24	47.13	20.69	87
38	10.00	10.00	0.00	70.00	10.00	10	16.10	19.49	25.42	25.42	13.56	118	22.73	13.64	22.73	36.36	4.55	88

TEACHER PREPARATION

Table 13. Total Sample: Percents for Responses, Questions 39 through 49

Question	<u>1</u>	2	<u>3</u>	4	<u>5</u>	<u>n</u>	
39	1.4	10.5	27.4	36.5	24.2	219	
40	11.0	27.5	22.9	25.2	13.3	218	
41	1.4	10.0	25.1	36.5	26.9	219	
42	0.5	12.3	21.5	40.6	25.1	219	
43	22.0	28.9	26.6	12.4	10.1	218	
44	1.4	7.8	29.7	33.8	27.4	219	
45	7.8	17.8	28.3	31.5	14.6	219	
46	47.9	26.0	16.0	5.5	4.6	219	
47	7.8	21.0	33.3	21.5	16.4	219	
48	0.9	0.9	11.5	32.3	54.4	217	
49	2.7	7.3	29.2	35.6	25.1	219	

TEACHER PREPARATION BROKEN DOWN BY GRADE

Table 14. Percents for Responses, Questions 39 through 49

	<u>GR</u> A	ADE 3	<u>3</u>				GRA	DE 7	<u>,</u>				GRA	<u>.DE 1</u>	1			
Question	1	2	3	4	5	n	1	2	<u>3</u>	4	5	n	1	2	3	4	5	n
39	1.72	10.34	30.17	35.34	22.41	116	0.00	14.29	22.45	32.65	30.61	49	1.89	5.66	26.42	43.40	22.64	53
40	13.91	34.78	23.48	20.87	6.96	115	10.20	22.45	12.24	36.73	18.37	49	5.66	16.98	32.08	24.53	20.75	53
41	0.00	11.21	27.59	32.76	28.45	116	2.04	8.16	10.20	44.90	34.69	49	3.77	9.43	32.08	37.74	16.98	53
42	0.86	19.83	26.72	37.93	14.66	116	0.00	6.12	12.24	46.94	34.69	49	0.00	1.89	16.98	41.51	39.62	53
43	30.17	34.48	24.14	7.76	3.45	116	16.33	32.65	18.37	16.33	16.33	49	9.62	11.54	40.38	19.23	19.23	52
44	0.86	10.34	33.62	31.03	24.14	116	2.04	4.08	14.29	44.90	34.69	49	1.89	5.66	33.96	30.19	28.30	53
45	9.48	18.97	31.03	31.03	9.48	116	4.08	16.33	26.53	26.53	26.53	49	7.55	16.98	22.64	37.74	15.09	53
46	57.76	22.41	12.07	6.03	1.72	116	42.86	22.45	22.45	4.08	8.16	49	32.08	35.85	18.87	5.66	7.55	53
47	6.90	18.97	35.34	21.55	17.24	116	6.12	18.37	34.69	20.41	20.41	49	11.32	28.30	26.42	22.64	11.32	53
48	0.86	0.86	15.52	29.31	53.45	116	2.04	2.04	4.08	28.57	63.27	49	0.00	0.00	7.84	43.14	49.02	51
49	1.72	6.03	22.41	34.48	35.34	116	6.12	4.08	34.69	34.69	20.41	49	1.89	11.32	39.62	39.62	7.55	53

TEACHER PREPARATION BROKEN DOWN BY REGION

Table 15. Percents for Responses, Questions 39 through 49

													~					
	URE	<u>BAN</u>					<u>SUB</u>	URB	<u>AN</u>			16	RUR	<u>AL</u>				
Question	1	2	3	4	5	n	1	2	3	4	5	n	1	2	3	4	<u>5</u>	n
39	0.00	20.00	10.00	50.00	20.00	10	0.84	8.40	26.89	36.97	26.89	119	2.27	12.50	30.68	32.95	21.59	88
40	10.00	50.00	20.00	20.00	0.00	10	10.92	31.09	22.69	22.69	12.61	119	11.49	19.54	24.14	28.74	16.09	87
41	0.00	0.00	30.00	30.00	40.00	10	0.00	9.24	26.05	37.82	26.89	119	3.41	12.50	23.86	35.23	25.00	88
42	0.00	0.00	30.00	50.00	20.00	10	0.84	9.24	21.85	42.86	25.21	119	0.00	18.18	20.45	36.36	25.00	88
43	10.00	20.00	30.00	30.00	10.00	10	21.01	33.61	23.53	10.92	10.92	119	25.29	24.14	28.74	12.64	9.20	87
44	0.00	0.00	60.00	20.00	20.00	10	0.84	10.08	23.53	33.61	31.93	119	2.27	5.68	35.23	35.23	21.59	88
45	20.00	10.00	20.00	40.00	10.00	10	4.20	16.81	22.69	35.29	21.01	119	11.36	20.45	36.36	25.00	6.82	88
46	40.00	20.00	10.00	20.00	10.00	10	43.70	26.8 9	16.81	6.72	5.88	119	54.55	26.14	14.77	2.27	2.27	88
47	30.00	20.00	30.00	20.00	0.00	10	3.36	20.17	27.73	26.89	21.85	119	11.36	22.73	42.05	12.50	11.36	88
48	0.00	0.00	20.00	20.00	60.00	10	0.85	0.85	9.32	33.05	55.93	118	1.15	1.15	13.79	31.03	5 2.87	87
49	0.00	20.00	10.00	30.00	40.00	10	1.68	5.88	30.25	32.77	29.41	119	4.55	7.95	30.68	40.91	15.91	88

INSTRUCTIONAL INFLUENCES

Table 16. Total Sample: Percents for Responses, Questions 50 through 59

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>n</u>
Question						
50	2.8	4.6	18.3	39.9	34.4	218
51	0.9	2.3	6.9	31.7	58.3	218
52	12.8	21.6	32.1	25.7	7.8	218
53	4.6	5.0	24.3	32.6	33.5	218
54	13.3	33.9	32.6	14.7	5.5	218
55	0.5	2.3	10.1	42.2	45.0	218
56	1.8	8.8	28.1	39.6	21.7	217
57	2.8	5.0	27.5	39.9	24.8	218
58	6.4	28.4	39.0	17.9	8.3	218
59	12.8	33.5	39.0	10.6	4.1	218

INSTRUCTIONAL INFLUENCES BROKEN DOWN BY GRADE

Table 17. Percents for Responses, Questions 50 through 59

	<u>GR</u> /	ADE 3	3				GRA	<u>DE 7</u>	<u>!</u>				GRA	<u>DE 1</u>	1			
Question	1	2	3	4	<u>5</u>	<u>n</u>	1	2	3	4	<u>5</u>	<u>n</u>	1	2	3	4	5	<u>n</u>
50	0.87	2.61	15.65	36.52	44.35	115	6.12	2.04	18.37	44.90	28.57	49	3.77	11.32	24.53	41.51	18.87	53
51	0.00	0.86	2.59	30.17	66.38	116	2.04	4.08	10.20	36.73	46.94	49	1.92	3.85	13.46	30.77	50.00	52
52	11.21	21.55	31.03	27.59	8.62	116	22.45	18.37	30.61	20.41	8.16	49	7.69	25.00	34.62	26.92	5.77	52
53	0.86	5.17	22.41	26.72	44.83	116	6.12	2.04	18.37	42.86	30.61	49	11.54	7.69	32.69	36.54	11.54	52
54	11.21	32.76	33.62	17.24	5.17	116	18.37	26.53	32.65	12.24	10.20	49	11.54	44.23	30.77	11.54	1.92	52
55	0.86	4.31	10.34	47.41	37.07	116	0.00	0.00	8.16	36.73	55.10	49	0.00	0.00	9.62	36.54	53.85	52
56	1.74	7.83	27.83	38.26	24.35	115	0.00	12.24	26.53	38.78	22.45	49	3.85	5.77	30.77	44.23	15.38	52
57	1.72	6.90	31.90	31.90	27.59	116	6.12	4.08	24.49	44.90	20.41	49	1.92	1.92	21.15	51.92	23.08	52
58	3.45	24.14	39.66	25.00	7.76	116	8.16	28.57	42.86	8.16	12.24	49	11.54	36.54	34.62	11.54	5.77	52
59	10.34	31.90	40.52	11.21	6.03	116	10.20	34.69	38.78	12.24	4.08	49	21.15	34.62	36.54	7.69	0.00	52

INSTRUCTIONAL INFLUENCES BROKEN DOWN BY REGION

Table 18. Percents for Responses, Questions 50 through 59

	<u>URE</u>	<u>BAN</u>					SUB	URB	<u>AN</u>				RUR	<u>AL</u>				
Question	1	2	3	4	5	n	1	2	<u>3</u>	4	5	<u>n</u>	1	2	3	4	5	ņ
50	0.00	0.00	20.00	30.00	50.00	10	3.39	7.63	22.03	35.59	31.36	118	2.27	1.14	12.50	46.59	37.50	88
51	0.00	0.00	20.00	30.00	50.00	10	0.00	3.39	5.08	28.81	62.71	118	2.27	1.14	7.95	36.36	52.27	88
52	0.00	20.00	20.00	20.00	40.00	10	14.41	23.73	32.20	25.42	4.24	118	12.50	18.18	32.95	27.27	9.09	88
53	0.00	0.00	10.00	20.00	70.00	10	5.93	7.63	29.66	25.42	31.36	118	3.41	2.27	18.18	43.18	32.95	88
54	20.00	10.00	4 0. 0 0	10.00	20.00	10	10.17	33.05	33.05	15.25	8.47	118	17.05	38.64	29.55	14.77	0.00	88
55	0.00	0.00	0.00	40.00	60.00	10	0.85	3.39	8.47	36.44	50.85	118	0.00	1.14	12.50	51.14	35.23	88
56	0.00	0.00	20.00	60.00	20.00	10	2.54	7.63	27.97	37.29	24.58	118	1.15	11.49	28.74	40.23	18.39	87
57	0.00	0.00	10.00	40.00	50.00	10	3.39	6.78	26.27	34.75	28.81	118	2.27	3.41	30.68	46.59	17.05	88
58	0.00	20.00	20.00	30.00	30.00	10	5.93	23.73	43.22	17.80	9.32	118	7.95	36.36	35.23	15.91	4.55	88
59	10.00	10.00	10.00	50.00	20.00	10	14.41	30.51	41.53	9.32	4.24	118	11.36	39.77	38.64	7.95	2.27	88

COMPUTERS AND TECHNOLOGY

Table 19. Total Sample: Percents for Responses, Questions 60 through 63

Question	1	2	<u>3</u>	4	<u>5</u>	<u>n</u>
60	5.0	19.7	57.3	9.2	8.7	218
61	1.4	17.8	20.1	26.0	34.7	219
62	15.5	22.8	38.8	10.0	12.8	219
63	7.8	4.6	58.0	11.9	17.8	219

COMPUTERS AND TECHNOLOGY BROKEN DOWN BY GRADE

Table 20. Percents for Responses, Questions 60 through 63

	<u>GR</u> A	ADE 3	3				GRA	DE 7	<u>'</u>				GRA	<u>DE 1</u>	1			
Question	1	2	3	4	5	n	<u>l</u>	2	3	4	5	n	1	2	<u>3</u>	4	<u>5</u>	n
60	4.35	7.83	73.04	6.96	7.83	115	2.04	26.53	53.06	10.20	8.16	49	9.43	39.62	28.30	11.32	11.32	53
61	2.59	12.07	28.45	28.45	28.45	116	0.00	28.57	8.16	20.41	42.86	49	0.00	20.75	13.21	26.42	39.62	53
62	12.07	22.41	43.97	6.90	14.66	116	24.49	18.37	36.73	12.24	8.16	49	15.09	28.30	30.19	15.09	11.32	53
63	3.45	4.31	81.03	3.45	7.76	116	18.37	6.12	40.82	14.29	20.41	4 9	7.55	3.77	22.64	28.30	37.74	53

COMPUTERS AND TECHNOLOGY BROKEN DOWN BY REGION

Table 21. Percents for Responses, Questions 60 through 63

	URE	<u>BAN</u>					<u>SUB</u>	URB	<u>AN</u>				RUR	AL				
Question	1	2	3	4	<u>5</u>	n	1	2	3	4	<u>5</u>	<u>n</u>	1	2	3	4	5	n
60	11.11	11.11	55.56	22.22	0.00	9	0.84	10.08	75.63	6.72	6.72	119	10.23	34.09	31.82	11.36	12.50	88
61	20.00	10.00	50.00	0.00	20.00	10	0.84	16.81	20.17	27.73	34.45	119	0.00	20.45	15.91	26.14	37.50	88
62	20.00	40.00	20.00	0.00	20.00	10	18.49	20.17	40.34	9.24	11.76	119	11.36	25.00	38.64	12.50	12.50	88
63	10.00	20.00	50.00	0.00	20.00	10	9.24	5.04	54.62	9.24	21.85	119	5.68	2.27	63.64	15.91	12.50	88

TEACHER BELIEFS

Table 22. Total Sample: Means for Responses, Questions 64 through 88

Question	Mean	<u>SD</u>	<u>n</u>	
64	4.50	0.73	219	
65	3.23	0.96	219	
66	3.28	0.89	218	
67	4.28	0.65	218	
68	4.27	0.63	219	
69	3.42	0.93	218	
70	2.39	0.86	217	
71	2.68	0.98	215	
72	4.22	0.61	218	
73	2.91	0.92	216	
74	4.10	0.65	218	
75	2.83	1.05	218	
76	3.69	0.93	216	
77	2.42	0.87	218	
78	2.39	0.95	217	
79	2.70	0.96	216	
80	3.30	0.86	217	
81	3.66	1.15	218	
82	2.54	0.89	217	
83	3.78	0.79	218	
84	3.17	1.06	217	
85	4.15	0.61	217	
86	4.32	0.60	219	
87	2.53	0.90	217	
88	2.47	0.87	217	

TEACHER BELIEFS BROKEN DOWN BY GRADE

Table 23. Means for Responses, Questions 64 through 88

	GRADE	3		GRADE 7		<u>G</u>	RADE 11		
Question	<u>Mean</u>	<u>SD</u>	<u>n</u>	Mean	<u>SD</u>	<u>n</u>	Mean	SD	<u>n</u>
64	4.59	0.61	112	4.38	0.85	47	4.37	0.87	51
65	3.08	0.95	112	3.26	1.01	47	3.53	0.95	51
66	3.19	0.92	112	3.40	0.85	47	3.45	0.81	51
67	4.26	0.63	112	4.28	0.74	47	4.33	0.62	51
68	4.18	0.66	112	4.34	0.56	47	4.47	0.61	51
69	3.44	0.99	112	3.38	0.82	47	3.47	0.90	51
70	2.45	0.90	112	2.34	0.73	47	2.33	0.89	51
71	2.77	0.97	112	2.70	1.00	47	2.47	0.99	51
72	4.13	0.62	112	4.34	0.64	47	4.33	0.52	51
73	2.90	0.91	112	2.83	0.99	47	2.98	0.88	51
74	4.01	0.68	112	4.06	0.64	47	4.35	0.59	51
75	2.87	1.04	112	3.02	0.97	47	2.67	1.05	51
76	3.80	0.90	112	3.62	1.03	47	3.51	0.88	51
77	2.26	0.81	112	2.40	0.74	47	2.71	0.99	51
78	2.54	0.99	112	2.34	0.84	47	2.18	0.93	51
7 9	2.86	1.01	112	2.64	0.90	47	2.43	0.88	51
80	3.25	0.88	112	3.19	0.92	47	3.47	0.81	51
81	3.75	1.15	112	3.57	1.08	47	3.55	1.21	51
82	2.55	0.85	112	2.60	0.90	47	2.49	0.95	51
83	3.87	0.78	112	3.81	0.85	47	3.65	0.74	51
84	3.17	1.08	112	3.23	1.07	47	3.08	1.02	51
85	4.06	0.61	112	4.19	0.65	47	4.29	0.61	51
86	4.32	0.57	112	4.23	0.67	47	4.39	0.60	51
87	2.44	0.85	112	2.77	0.94	47	2.53	0.92	51
88	2.38	0.76	112	2.47	0.91	47	2.63	1.00	51

TEACHER BELIEFS BROKEN DOWN BY REGION

Table 24. Means for Responses, Questions 64 through 88

	URBAN Mean SD n			SUBUR	BAN		RURAL		
0	Mean	<u>SD</u>	<u>n</u>	Mean	<u>SD</u>	<u>n</u>	Mean	<u>SD</u>	<u>n</u>
Question	4.60	0.70	10	4.45	0.05	117	4.61	0.57	82
64	4.60	0.70	10	4.45	0.85	117	4.51	0.57	82
65	3.70	0.95	10	3.30	0.94	117	3.04	0.99	82
66	3.50	0.97	10	3.28	0.82	117	3.27	0.97	82
67	4.60	0.52	10	4.23	0.71	117	4.31	0.58	82
68	4.30	0.82	10	4.27	0.67	117	4.28	0.57	82
69	3.60	0.84	10	3.54	0.92	117	3.24	0.94	82
70	2.70	1.16	10	2.34	0.80	117	2.46	0.89	82
71	2.40	1.35	10	2.62	0.93	117	2.81	1.01	82
72	4.00	0.82	10	4.22	0.60	117	4.23	0.59	82
73	3.20	1.03	10	2.68	0.89	117	3.23	0.85	82
74	4.00	0.82	10	4.15	0.67	117	4.06	0.64	82
75	3.20	1.32	10	2.85	1.02	117	2.83	1.02	82
76	3.70	0.95	10	3.56	0.95	117	3.89	0.86	82
77	2.50	0.97	10	2.36	0.89	117	2.43	0.80	82
78	1.90	0.74	10	2.32	0.87	117	2.57	1.07	82
79	2.60	0.97	10	2.66	0.88	117	2.81	1.07	82
80	3.30	0.82	10	3.27	0.89	117	3.31	0.87	82
81	4.30	0.95	10	3.48	1.19	117	3.84	1.07	82
82	3.00	1.16	10	2.42	0.75	117	2.71	0.96	82
83	3.80	0.63	10	3.77	0.86	117	3.87	0.68	82
84	3.20	1.23	10	3.12	1.08	117	3.26	1.00	82
85	4.10	0.32	10	4.22	0.63	117	4.04	0.62	82
3 6	4.50	0.53	10	4.35	0.66	117	4.23	0.50	82
87	2.00	0.67	10	2.45	0.91	117	2.73	0.85	82
38	2.20	0.63	10	2.39	0.86	117	2.57	0.88	82

ATTITUDE TOWARD ASSESSMENT

Table 25. Total Sample: Percents for Responses, Questions 89 through 93

Question	1	2	<u>3</u>	4	<u>5</u>	ņ
89	15.1	18.3	33.0	30.3	3.2	218
90	13.8	17.5	53.0	14.7	0.9	217
91	9.2	13.4	34.6	37.8	5.1	217
92	10.6	13.8	34.6	37.3	3.7	217
93	13.8	18.9	43.3	21.7	2.3	217

ATTITUDE TOWARD ASSESSMENT BROKEN DOWN BY GRADE

Table 26. Percents for Responses, Questions 89 through 93

	<u>GR</u> /	ADE 3	<u>3</u>				GRA	<u>DE 7</u>	· -				GRADE 11					
Question	1	2	3	4	5	n	1	2	3	4	<u>5</u>	n	1	2	3	4	<u>5</u>	<u>n</u>
89	19.83	3 22.41	33.62	20.69	3.45	116	8.33	12.50	25.00	47.92	6.25	48	11.32	15.09	37.74	35.85	0.00	53
90	18.97	20.69	46.55	12.93	0.86	116	8.33	6.25	60.42	22.92	2.08	48	7.69	21.15	59.62	11.54	0.00	52
91	12.9	3 12.93	37.93	30.17	6.03	116	4.17	4.17	25.00	62.50	4.17	48	5.77	23.08	36.54	30.77	3.85	52
92	16.38	3 15.52	37.93	26.72	3.45	116	4.17	4.17	33.33	54.17	4.17	48	3.85	19.23	28.85	44.23	3.85	52
93	20.69	17.24	42.24	17.24	2.59	116	4.17	20.83	35.42	35.42	4.17	48	7.69	21.15	51.92	19.23	0.00	52

ATTITUDE TOWARD ASSESSMENT BROKEN DOWN BY REGION

Table 27. Percents for Responses, Questions 89 through 93

	<u>URI</u>	BAN					SUB	URB	AN				RURAL					
Question	1	2	3	4	<u>5</u>	<u>n</u>	1	2	<u>3</u>	4	<u>5</u>	ū	1	2	<u>3</u>	4	<u>5</u>	n
89	0.00	20.00	60.00	20.00	0.00	10	11.86	21.19	38.98	24.58	3.39	118	21.59	13.64	22.73	38.64	3.41	88
90	0.00	30.00	60.00	10.00	0.00	10	11.11	17.09	55.56	15.38	0.85	117	19.32	15.91	50.00	13.64	1.14	88
91	0.00	10.00	50.00	30.00	10.00	10	6.84	13.68	37.61	36.75	5.13	117	13.64	12.50	29.55	39.77	4.55	88
92	0.00	20.00	40.00	30.00	10.00	10	9.40	14.53	38.46	35.90	1.71	117	12.50	11.36	29.55	40.91	5.68	88
93	10.00	10.00	50.00	20.00	10.00	10	11.97	22.22	43.59	20.51	1.71	117	15.91	14.77	43.18	23.86	2.27	88

PART 2: DEMOGRAPHICS

Table 28. Total Sample: Percents for Responses, Questions 94 through 99

Question	1		2		<u>n</u>	
94	93.12		6.88		218	
	1	2	<u>3</u>	<u>4</u>	<u>5</u>	<u>n</u>
95	96.3	3.2	0.5	0.0	0.0	218
96	6.8	6.4	16.9	16.0	53.9	219
97	34.7	11.0	53.4	0.9	0.0	219
98	61.0	1.4	13.8	18.3	5.5	218
99	3.7	15.2	25.3	31.8	24.0	217

DEMOGRAPHICS BROKEN DOWN BY GRADE

Table 29. Percents for Responses, Questions 94 through 99

	<u>GR</u> A	ADE 3	3				<u>GRA</u>	DE 7	<u>.</u>				GRA	<u>DE 1</u>	1			
Question	1		2		<u>n</u>		1		2		n		1		2		<u>n</u>	
94	96.52		3.48		115		93.88		6.12		49		84.91		15.09		53	
	1	2	<u>3</u>	<u>4</u>	<u>5</u>	<u>n</u>	1	2	<u>3</u>	<u>4</u>	<u>5</u>	<u>n</u>	1	2	<u>3</u>	<u>4</u>	<u>5</u>	<u>n</u>
95	93.97	5.17	0.86	0.00	0.00	116	97.92	2.08	0.00	0.00	0.00	48	100.0	0.00	0.00	0.00	0.00	53
96	8.62	6.90	13.79	18.10	52.59	116	2.04	6.12	16.33	18.37	14	49	7.55	5.66	24.53	9.43	52.83	53
97	37.93	9.48	52.59	0.00	0.00	116	24.49	16.33	59.18	0.00	v. 00	49	37.74	7.55	50.94	3.77	0.00	53
98	97.41	0.00	0.00	1.72	0.86	116	39.58	6.25	18.75	16.67	18.75	48	1.89	0.00	37.74	56.60	3.77	53
99	6.14	21.05	24.56	25.44	22.81	114	2.04	6.12	26.53	38.78	26.53	49	0.00	11.32	24.53	39.62	24.53	53

DEMOGRAPHICS BROKEN DOWN BY REGION

Table 30. Percents for Responses, Questions 94 through 99

	URBAN		SUBURBAN						RURAL								
Question	1	2		n		1		2		n		1		2		n	
94	77.78	22.22	2	9		93.28		6.72		119		94.32		5.68		88	
	1 2	<u>3</u>	<u>4</u>	<u>5</u>	<u>n</u>	1	2	<u>3</u>	<u>4</u>	<u>5</u>	<u>n</u>	1	2	<u>3</u>	4	<u>5</u>	<u>n</u>
95	40.00 60.	00.00	0.00	0.00	10	98.31	0.85	0.85	0.00	0.00	118	100.0	0.00	0.00	0.00	0.00	88
96	10.00 10.	00 10.00	0.00	70.00	10	7.56	5.88	15.97	14.29	56.30	119	5.68	6.82	18.18	20.45	48.86	88
97	70.00 10.	00 20.00	0.00	0.00	10	26.89	5.88	65.55	1.68	0.00	119	39.77	18.18	42.05	0.00	0.00	88
98	70.00 10.	00.0	20.00	0.00	10	61.86	0.85	12.71	16.95	7.63	118	57.95	1.14	17.05	20.45	3.41	88
99	10.00 0.0	30.00	40.00	20.00	10	3.42	14.53	25.64	30.77	25.64	117	3.41	17.05	25.00	31.82	22.73	88

TEACHER INVOLVEMENT IN ASSESMENT

Table 31. Total Sample: Percents for Responses, Questions 100 through 102

Question	1	2	<u>n</u>
100	48.4	51.6	217
101	80.3	19.7	218
102	69.1	30.9	217

TEACHER INVOLVEMENT IN ASSESSMENT BROKEN DOWN BY GRADE

Table 32. Percents for Responses, Questions 100 through 102

									
	GRADE	<u>3</u>		GRADE	<u>7</u>		GRADE	11	
Question	1	2	<u>n</u>	1	2	<u>n</u>	1	2	ū
100	66.09	33.91	115	31.25	68.75	48	26.42	73.58	53
101	83.62	16.38	116	70.83	29.17	48	81.13	18.87	53
102	72.17	27.83	115	64.58	35.42	48	67.92	32.08	53

TEACHER INVOLVEMENT IN ASSESSMENT BROKEN DOWN BY REGION

Table 33. Percents for Responses, Questions 100 through 102

	URBAN			SUBURE	BAN		RURAL				
Question	1	2	<u>n</u>	1	2	<u>n</u>	1	2	<u>n</u>		
100	90.00	10.00	10	53.39	46.61	118	37.93	62.07	87		
101	100.0	0.00	10	85.59	14.41	118	70.45	29.55	88		
102	60.00	40.00	10	72.65	27.35	117	64.77	35.23	88		

TEACHER BELIEFS (COMMUNICATION ARTS)

Table 34. Total Sample: Means for Responses, Questions 103 through 116

Question	<u>Mean</u>	SD	<u>n</u>
103	2.79	1.11	218
104	3.53	1.24	218
105	3.92	0.83	218
106	4.37	0.77	218
107	4.21	0.83	218
108	3.99	1.00	218
109	3.84	1.03	217
110	2.06	0.97	218
111	1.73	0.75	218
112	1.94	1.05	218
113	3.41	1.07	218
114	3.52	1.07	216
115	4.09	0.85	218
116	2.34	1.26	218

TEACHER BELIEFS (COMMUNICATION ARTS) BROKEN DOWN BY GRADE

Table 35. Means for Responses, Questions 103 through 116

	GRADE 3			GRADE 7			GRADE 11		
Question	Mean	SD	<u>n</u>	Mean	SD	<u>n</u>	Mean	SD	n
103	2.63	1.02	114	2.96	1.25	47	3.00	1.13	53
104	3.56	1.21	114	3.60	1.38	47	3.45	1.22	53
105	3.84	0.76	114	4.13	0.80	47	3.96	0.96	53
106	4.25	0.71	114	4.47	0.91	47	4.55	0.75	53
107	4.16	0.79	114	4.36	0.71	47	4.17	1.00	53
108	3.96	0.95	114	4.21	0.81	47	3.83	1.24	53
109	3.73	1.02	114	4.06	1.05	47	3.85	1.03	53
110	2.18	0.99	114	2.06	1.03	47	1.85	0.84	53
111	1.82	0.76	114	1.55	0.65	47	1.72	0.79	53
112	2.09	1.09	114	1.60	0.74	47	1.98	1.15	53
113	3.21	1.00	114	3.68	1.00	47	3.57	1.15	53
114	3.42	1.06	114	3.58	1.10	47	3.66	1.09	.53
115	4.03	0.87	114	4.28	0.80	47	4.04	0.88	53
116	2.31	1.26	114	2.92	1.33	47	1.96	1.06	53

TEACHER BELIEFS (COMMUNICATION ARTS) BROKEN DOWN BY REGION

Table 36. Means for Responses, Questions 103 through 116

	URBAN			SUBURBAN			RURAL		
Question	Mean	SD	n	Mean	SD	n	Mean	SD	<u>n</u>
103	3.10	0.74	10	2.68	1.12	116	2.93	1.13	87
104	3.70	1.25	10	3.37	1.34	116	3.75	1.10	87
105	3.70	0.68	10	4.03	0.74	116	3.82	0.93	87
106	4.10	0.88	10	4.38	0.77	116	4.37	0.78	87
107	3.70	1.06	10	4.23	0.83	116	4.21	0.79	87
108	3.40	1.51	10	3.97	0.96	116	4.05	0.99	87
109	3.50	1.18	10	3.83	1.07	116	3.87	0.95	87
110	2.80	1.69	10	2.04	0.93	116	2.00	0.88	87
111	1.70	0.68	10	1.72	0.76	116	1.76	0.76	87
112	2.00	0.94	10	2.03	1.14	116	1.89	0.96	87
113	2.70	1.16	10	3.22	1.07	116	3.77	0.91	87
114	2.70	1.34	10	3.59	1.06	116	3.51	1.03	87
115	3.50	1.35	10	4.11	0.81	116	4.10	0.84	87
116	2.80	1.40	10	2.24	1.25	116	2.47	1.27	87

ASSESSMENT EVALUATION

Table 37. Total Sample: Means for Responses, Questions 117 through 121

Question	Mean	<u>SD</u>	<u>n</u>
117	3.14	1.05	132
118	3.05	1.09	132
119	2.63	1.18	131
120	2.25	1.12	124
121	2.63	1.10	123

ASSESSMENT EVALUATION BROKEN DOWN BY GRADE

Table 38. Means for Responses, Questions 117 through 121

	GRADE 3			GRADE 7			GRADE 11		
Question	Mean	SD	<u>n</u>	Mean	SD	<u>n</u>	Mean	SD	<u>n</u>
117	2.94	1.07	64	3.25	0.94	24	3.35	1.09	26
118	2.77	1.14	64	3.17	0.96	24	3.31	1.09	26
119	2.34	1.07	64	2.96	1.04	24	2.73	1.37	26
120	2.03	1.10	64	2.17	1.09	24	2.73	1.04	26
121	2.47	0.98	64	2.88	1.08	24	2.89	1.31	26

ASSESSMENT EVALUATION BROKEN DOWN BY REGION

Table 39. Means for Responses, Questions 117 through 121

URBAN SUBURBAN RURAL Question Mean SD n Mean SD n 117 3.33 0.82 6 3.05 1.03 56 3.14 1.10 52 118 3.17 0.75 6 2.79 1.12 56 3.17 1.12 52 119 3.50 0.84 6 2.52 1.19 56 2.54 1.11 52 120 2.67 1.21 6 2.21 1.14 56 2.17 1.08 52 121 3.17 0.98 6 2.68 1.05 56 2.56 1.15 52										
Question 117 3.33 0.82 6 3.05 1.03 56 3.14 1.10 52 118 3.17 0.75 6 2.79 1.12 56 3.17 1.12 52 119 3.50 0.84 6 2.52 1.19 56 2.54 1.11 52 120 2.67 1.21 6 2.21 1.14 56 2.17 1.08 52		<u>URBAN</u>			SUBURBAN			RURAL		
118 3.17 0.75 6 2.79 1.12 56 3.17 1.12 52 119 3.50 0.84 6 2.52 1.19 56 2.54 1.11 52 120 2.67 1.21 6 2.21 1.14 56 2.17 1.08 52	Question	Mean	SD	<u>n</u>	Mean	<u>SD</u>	n	Mean	SD	<u>n</u>
119 3.50 0.84 6 2.52 1.19 56 2.54 1.11 52 120 2.67 1.21 6 2.21 1.14 56 2.17 1.08 52	117	3.33	0.82	6	3.05	1.03	56	3.14	1.10	52
120 2.67 1.21 6 2.21 1.14 56 2.17 1.08 52	118	3.17	0.75	6	2.79	1.12	56	3.17	1.12	52
	119	3.50	0.84	6	2.52	1.19	56	2.54	1.11	52
121 3.17 0.98 6 2.68 1.05 56 2.56 1.15 52	120	2.67	1.21	6	2.21	1.14	56	2.17	1.08	52
	121	3.17	0.98	6	2.68	1.05	56	2.56	1.15	52